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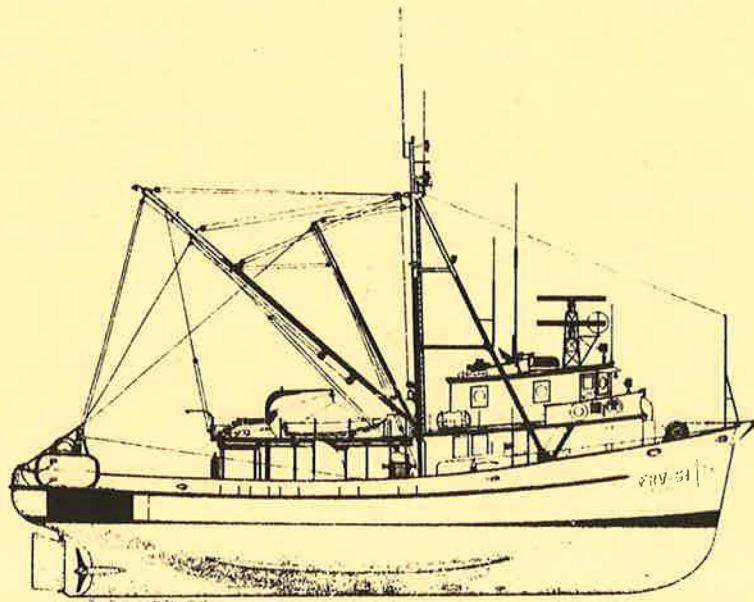
**National Marine  
Fisheries Service**

**U.S. DEPARTMENT OF COMMERCE**

## **NWAFc PROCESSED REPORT 80-13**

### **REPORT TO INDUSTRY ON THE 1980 EASTERN BERING SEA KING AND TANNER CRAB SURVEY**

**September 1980**





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**Northwest and Alaska Fisheries Center Processed Report 80-13**  
**Report to Industry on the**  
**1980**  
**Eastern Bering Sea**  
**King and Tanner Crab Survey**

**by**

**R.S. Otto, R.A. MacIntosh, L.A. Gardner and T.M. Armetta**

**National Marine Fisheries Service  
Northwest and Alaska Fisheries Center  
Kodiak Facility  
P.O. Box 1638  
Kodiak, Alaska 99615**

**September 1980**

## THE 1980 EASTERN BERING SEA CRAB SURVEY

An annual trawl survey is conducted in the eastern Bering Sea to provide information on the distribution and abundance of four species of crabs. This information is provided to fishermen and processors as an aid in locating productive areas and judging the overall availability of crabs. Survey derived information is also used as part of the basis for management decisions. This report deals with the distribution and abundance of red king crab (Paralithodes camtschatica), blue king crab (P. platypus), and two species of Tanner crab (Chionoecetes bairdi and C. opilio). Hybrid Tanner crabs are also discussed. Data on the distribution and abundance of groundfish are also collected as part of the survey and are available from the National Marine Fisheries Service Montlake Laboratory (2725 Montlake Blvd. East, Seattle, Washington 98112).

### Survey Area and Methods

The area covered by the survey in 1979 and 1980 is shown in Figure 1. Although the 1980 survey area is smaller, it contains the most important areas inhabited by the four species of crabs discussed in this report. The survey was conducted by the NOAA R/V OREGON and the F/V OCEAN HARVESTER. From May 12 through July 24, a total of 362 successful tows were made using the standard trawl gear.

Both vessels used identical methods. Each station consisted of a one-half hour tow made with a 400 mesh eastern otter trawl. The trawl was constructed of 36 thread 4-inch mesh in the wings, 60 thread 3-1/2 inch mesh in the intermediate and 96 thread 1-1/4 inch mesh codend liner. It was rigged with 18 eight inch floats on the head rope and 25 fathom dandy lines (10 fathom single, 15 fathom double). The doors were of the Astoria "V" type and measured 5 x 7 feet. The footrope was 94 feet and the headrope was 71 feet in length. Observations by SCUBA divers have shown that the trawl sweeps an average of forty feet of bottom. A tracing of the bottom profile was made with a recording echo sounder during each tow. A tracing of the surface to bottom temperature profile was taken with an expendable bathythermograph (XBT) at as many stations as possible. When the trawl was brought aboard, crabs were separated from the rest of the catch and sorted by species, sex, and size.

### Interpreting Tables and Figures

The OREGON towed an average of 1.2 miles in one-half hour and the OCEAN HARVESTER towed an average of 1.5 miles. In order to adjust for this difference, catches are presented in accompanying tables as the number of crab caught per mile towed (rounded to the nearest whole number). The charts are based on 20 by 20 mile squares. In cases where more than one tow was made in a square, the average number of crabs per mile towed is presented. It is advisable to cross-reference the charts with the tables to obtain more exact positions. Charts and tables showing the percentage of legal crab should be carefully cross-referenced since high percentages of legal crab are often found in areas of low abundance.

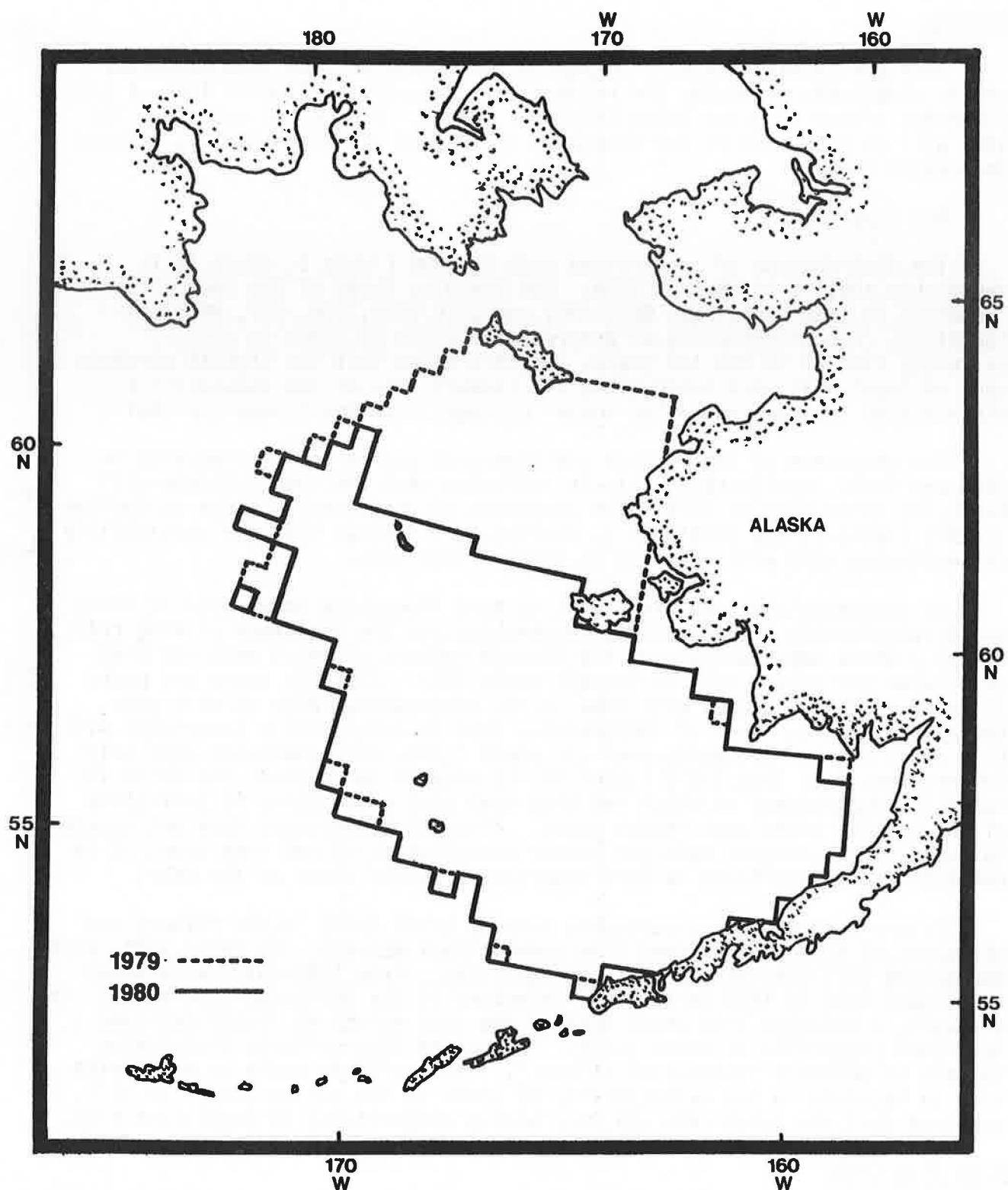


Figure 1 -- NMFS eastern Bering Sea crab survey areas in 1979 and 1980.

## Results

Only preliminary analysis of population abundance have been conducted and no population estimates are ready to be released. A general idea of crab abundance trends is given below (Tables 1 and 2). Population estimates for 1980 will be presented at the September meeting of the North Pacific Fishery Management Council.

### Red King Crab:

The distribution of legal-sized crab in 1980 (Table 3, Chart 1) is remarkably similar to that of 1979. For example, three of the four highest "squares" in 1980 (F05, F06, G07, H06) and 1979 (F05, F06, G07, G08) are identical. The distribution of pre-recruit (Chart 2) crabs is also extremely similar in the two years. Chart 3 shows that the highest percentages of legal crab were taken along the seaward edge of the population's distribution in areas where the number of legal crab was frequently small.

The abundance of legal-sized red king crab was at an all time high in 1978 and 1979. Preliminary analysis indicated that the 1980 estimate will be 10-20% below that of 1979. The abundance of pre-recruits began to decline in 1979 (Table 1) and continues to decline. It follows that the availability of legal-size crab will continue to decline into 1981.

In conversations with fishermen, we have frequently been asked if there was a relationship between bottom temperature and the abundance of king crabs. Figure 2 shows temperatures and the average numbers of legal male red king crab taken per square mile in surveys since 1977. Although there are peaks in catch rates associated with some narrow temperature range in each year, there is no narrow range of temperatures that is consistently associated with high catch rates. Averaging over six years (1975-1980) indicates that only temperatures less than 5.0°C (about 41° F) seem to be favored. The shift in range of temperatures at which red king crab were encountered is indicative of the warming trend over recent years. Although temperature does not appear to exert strong control over the summer distribution of red king crab, it is possible that temperature is more important at other times of the year.

Figure 3 shows the relationship between catch rates in the fishery and estimates of abundance derived from annual trawl surveys. Up until 1976, plotted points fell very nearly on a straight line. From 1976-1978 catch rates were lower than in 1975 in spite of increases in the estimated population. As a result, a straight line drawn through the data points no longer provided a very good prediction of catch rates. The curved line reflects diminishing returns or possible "saturation effects". These effects could be associated with an increase in the vulnerability of crabs to the survey gear. In 1979, it appeared that the catch rate was very nearly proportional to population size.

### Blue King Crab

This species is found in significant concentrations in the vicinity of the Pribilof Islands and St. Matthew Island (Charts 4, 5, and 6). Some blue crab are also found southwest of St. Lawrence Island in the area near the international date line (see Table 4). Populations are generally very sparse in this area, and the crab are mostly small.

Table 1. -- Population estimates in millions of crabs for eastern Bering Sea king crabs from NOAA/NMFS surveys.

RED KING CRABS

YEAR	PRE-RECRUITS*	LEGALS*
1969	19.5	9.8
1970	8.4	5.3
**		
1972	8.3	5.4
1973	25.9	10.9
1974	31.2	20.8
1975	29.6	21.2
1976	49.3	32.7
1977	63.9	37.6
1978	52.5	46.6
1979	38.8	45.5

PRIBILOF BLUE KING CRABS

YEAR	PRE-RECRUITS*	LEGALS*
1974	3.1	1.9
1975	8.0	7.5
1976	2.1	3.9
1977	2.2	9.4
1978	5.6	4.3
1979	1.5	4.6

\* The size groups 5.0" - 6.25" and over 6.25" have been used for pre-recruits and legals, respectively, for purposes of comparison with previous years.

\*\* Limited survey in 1971, not used for population estimates.

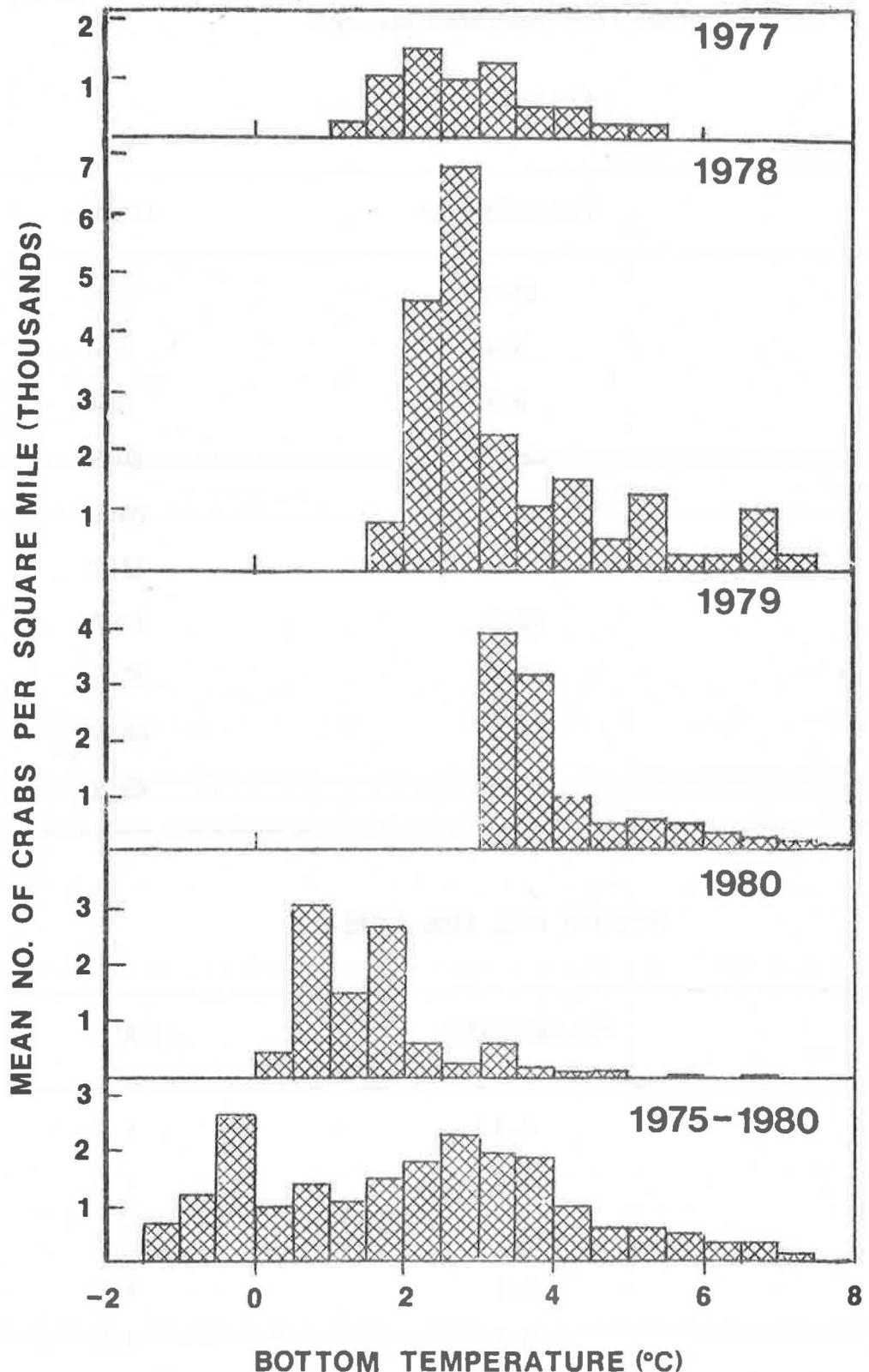


Figure 2. -- Average number of legal-sized male red king crab (*Paralithodes camtschatica*) per square mile found at various bottom temperatures in the 1975-1980 NMFS Bering Sea surveys. Data are summarized in 0.5 degree intervals.

The distribution of legal-sized blue king crab in the Pribilof Islands area differed only slightly from that of 1979. In the past two years, relatively more crab have been taken in areas north and east of the islands and fewer crab to the south and west (Chart 4). The distribution of pre-recruits (Chart 5) was about the same as in 1979, and in both years was similar to that of legal-size males. The percentage of legal crab taken in each square is shown in Chart 6.

Abundance trends in the Pribilof Islands (Table 1) have been quite variable over the years. Further, there is no readily apparent relationship between the estimated number of pre-recruits in one year and the estimated number of legals in the years immediately following. We suspect that much of the fluctuation in abundance estimates reflects the fact that blue crab occur at only 10 to 20 survey squares near the Pribilofs in any given year. Catches over the past five years have been stable.

In the St. Matthew Island area, legal-sized crab were caught at more stations in 1980 and were more widely scattered than in 1979. In both years most legal crab were taken south and west of the island. The distribution of pre-recruit crab was similar in this respect. The percentage of legal crab in each square is given in Chart 6.

The abundance of legal-sized crab in the St. Matthew Island area appears to be roughly similar to that of 1978 and 1979. It is noted that very poor commercial fishing was reported during the summer of 1979, and there was no fishing in the area during the summer of 1980. Estimation of St. Matthew Island blue king crab abundance is difficult because much of the area close to the island is untrawlable.

#### Bairdi Tanner Crab:

The distribution of legal-sized bairdi Tanner crab (Chart 7, Table 5) shows areas of concentration north of False Pass (B07, B08), in outer Bristol Bay just north of Port Moller (E10, F11) and in the eastern Pribilof Islands F20, G21). The heaviest concentrations in 1979 occurred north of False Pass and in outer Bristol Bay. The area near A03 was an area of high pre-recruit abundance in 1979 and perhaps explains the small area of high legal abundance near there in 1980. There appears to be more legal crab in the Pribilof area in 1980 than in 1979. Most notably, legal crab were in very low abundance in the area north of row C extending from columns 1 - 8. The distribution of pre-recruit crab (Chart 8) was largely similar to that of legals, except that higher concentrations were found in the Pribilof Islands and north of Unimak Pass. Percentages of legal crab taken in each square are given on Chart 9.

The overall abundance of legal and pre-recruit Tanner crab (Table 2) shows a decline over the past several years with a sharp decline in 1978. The abundance of legal crab in 1980 appears to be the same as that of 1979. Preliminary analysis indicates that the number of pre-recruit crab is somewhat higher and points to improved conditions in the future.

The relationship between the average number of legal bairdi Tanner crab per square mile and bottom temperature during the past four years is shown in Fig. 4. The temperatures at which bairdi crab have been encountered increased from 1977-1979, reflecting the trend toward milder weather during the same period. Generally, colder conditions prevailed in 1980. Differences in bottom temperatures from 1979 to 1980 do not, however, seem to explain difference in the distribution of C. bairdi. The bottom panel of Fig. 4 shows that the highest catches of bairdi Tanner crabs have occurred in the 0-5° range. There

## RED KING CRAB LEGAL MALES

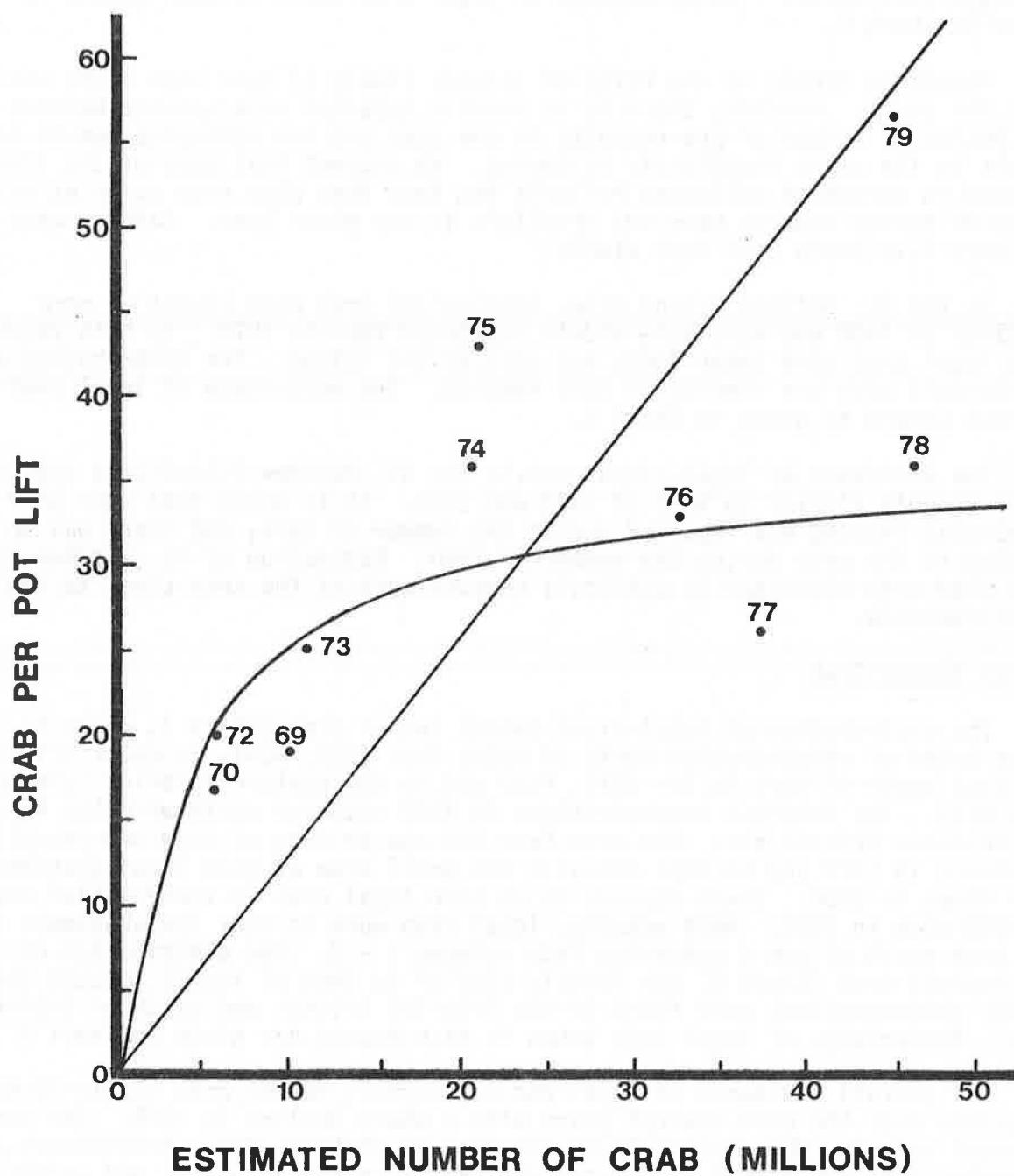


Figure 3. -- Relationship between the season average number of Red King Crab (Paralithodes camtschatica) taken per pot in the U.S. Fishery and estimates of stock size from NMFS trawl surveys in the preceding summer.

Table 2. -- Population estimates of Tanner crab in the eastern Bering Sea, South of 58°, by species and size from NMFS annual surveys, 1973-1978 (sizes are carapace widths).

	MILLIONS OF CRAB BY YEAR						
	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>
<u>BAIRDI MALES</u>							
Large (over 5.0") <sup>1</sup>	66.9	130.5	209.6	157.8	111.1	57.9	39.7
Legal (over 5.5") <sup>1</sup>			109.5		92.1	45.6	31.5
Pre-recruit (3.3" - 5.0")	140.5	255.0	207.5	131.7	159.6	90.1	69.4
Pre-recruit (3.9" - 5.5")				136.6	116.3	81.2	47.7
<u>OPILIO MALES</u>							
Large (over 4.2")	84.7	246.7	274.8	181.6	137.3	78.4	106.3
Small (under 4.3")	115.2	1480.3	1916.7	2221.1	1850.9	830.2	779.4
<u>HYBRID MALES</u>							
Large (over 4.2")			33.8	16.5	15.4	5.6	4.9
Small (under 4.3")			47.5	27.8	141.2	11.8	9.8

<sup>1</sup>Legal size for calendar year 1977.

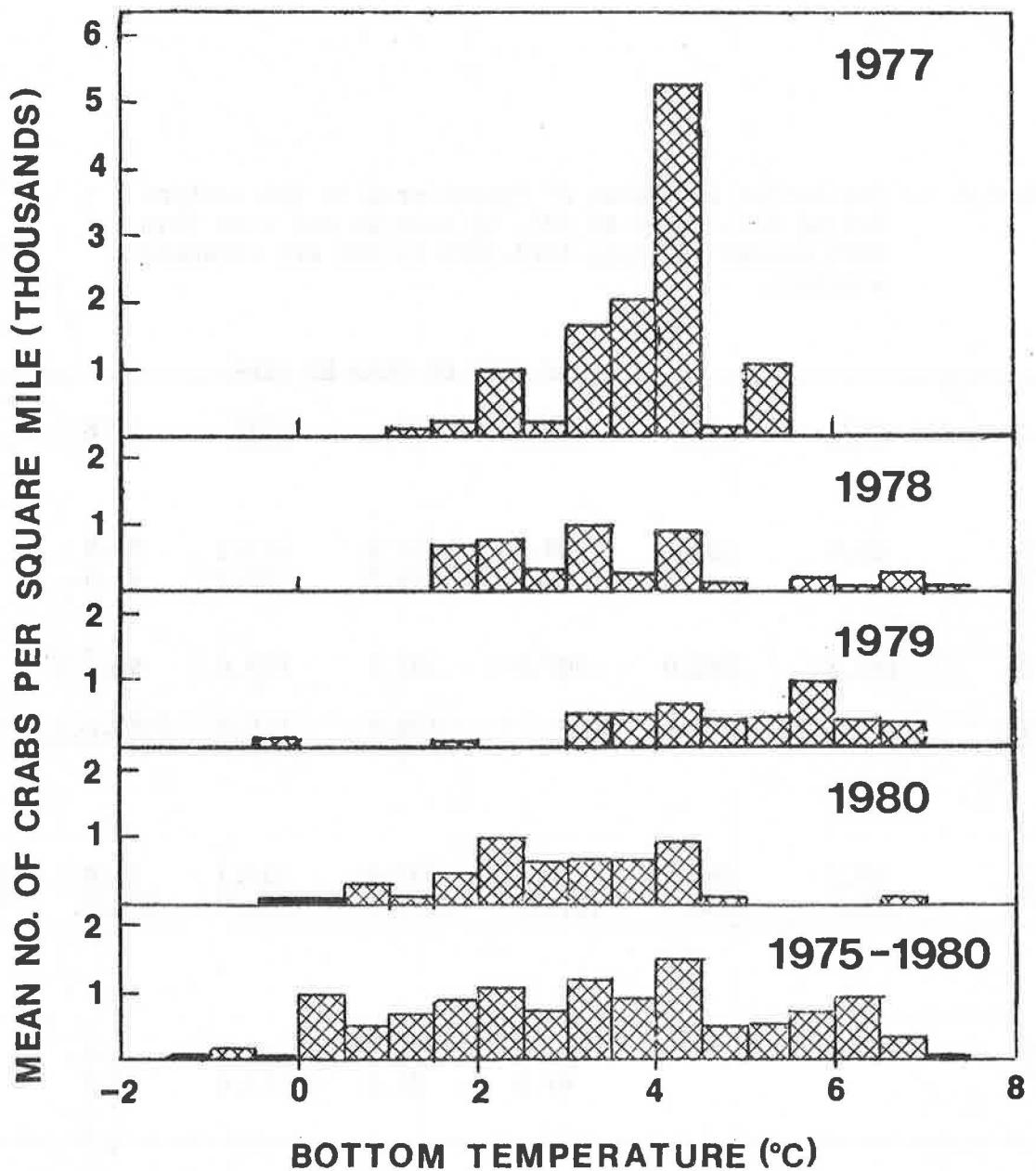


Figure 4. -- Average number of legal-sized male Tanner crab (*Chionoecetes bairdi*) per square mile found at various bottom temperatures in the 1975-1980 NMFS Bering Sea Surveys. Data Are summarized in 0.5 degree intervals.

does not appear to be a narrower range of temperatures in which the highest catch rates consistently have occurred.

Figure 5 shows the relationship between catch rates in the fishery and estimates of abundance from the survey. The curved line shown in the Figure seems to fit the data better than the straight line, however, there are few data points and no strong conclusion can be drawn.

#### Opilio and Hybrid Tanner Crab:

In reports prior to 1979, opilio and hybrid Tanner crabs have been reported separately. They have since been combined because the number of hybrids encountered was small and most of the commercial catch of hybrids is landed as opilio. There are no size limits for either group, but the majority of the commercial catch of both groups is larger than 110 mm (4.3 inches). This corresponds to the "large" size group in Charts 10-12 and Table 6.

The distribution of large opilio and hybrid Tanner crab (Chart 10, Table 6), in 1980, is very different than that of 1978 and 1979. There are major areas of concentration both east and west of the Pribilof Islands but legal crab were very scattered in the remainder of the survey area. By contrast, in 1978 and 1979 the major area of concentration was centered around station I04 and concentrations near the Pribilof Islands were less prominent. The distribution of pre-recruit opilio and hybrid crab (Chart 11) is similar to that of large males except that relatively more pre-recruits were found north of the Pribilos, and in the central area near I04. Chart 12 shows that the highest percentages of large crab occurred where numbers caught were small.

Preliminary analysis of the abundance of opilio and hybrids indicates that large males are less abundant than last year. Analysis of the abundance of opilio and hybrid Tanner crab is complicated by the fact that the survey occurs at the same time as domestic and foreign fisheries.

The relationship between the average catch per square mile and bottom temperature during the past five years (Figure 6) shows that few opilio are taken where temperatures exceed 5.0° C in any year. Colder conditions may explain the scattered distribution of C. opilio and hybrids in 1980 relative to 1978 and 1979.

#### Bottom Temperatures

As seen on Chart 13, no minus temperatures were observed south of 59°, nor were they observed in 1977, 1978, or 1979. Temperature patterns over the past four years have been radically different than those of 1976 and previous years when minus temperatures were commonly observed as far south as 56°.

None the less, the temperature regime in 1980 was radically different than that of 1979. For example, water colder than 2° C was not found south of 59° or east of 172° in 1979; while in 1980 water colder than 2°C was found south of 57° and extended well into outer Bristol Bay, as far east as 160°. Similarly, water colder than 3° was not found east of the Pribilof Islands in 1979, but in 1980 much of the survey area east of the Pribilof Islands had bottom temperatures less than 3°C.

## BAIRDI TANNER CRAB LEGAL MALES

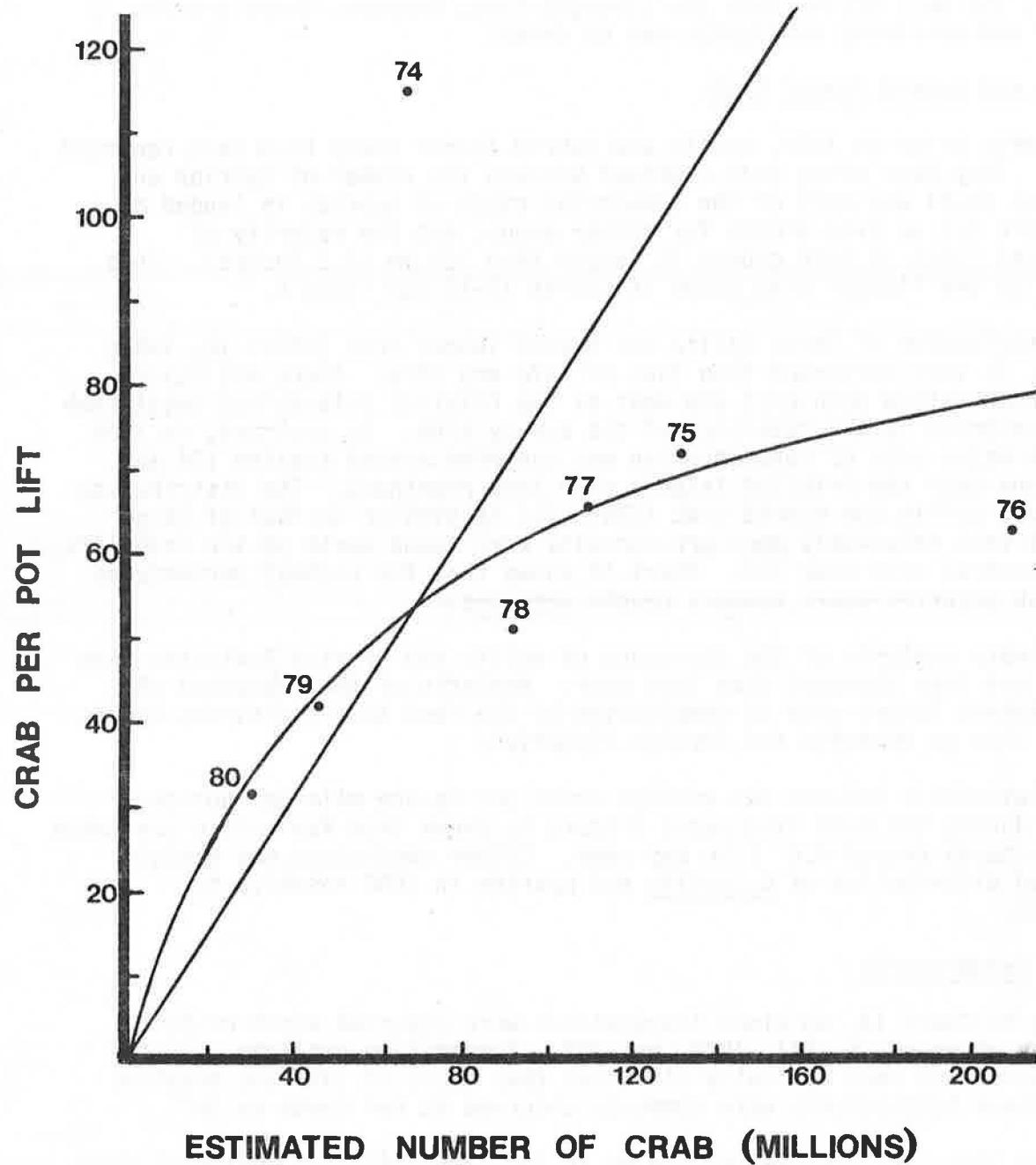


Figure 5. -- Relationship between the season average number of Tanner crab (*Chionoecetes bairdi*) taken per pot in the U.S. Fishery and estimates of stock size from NMFS trawl surveys in the preceding summer.

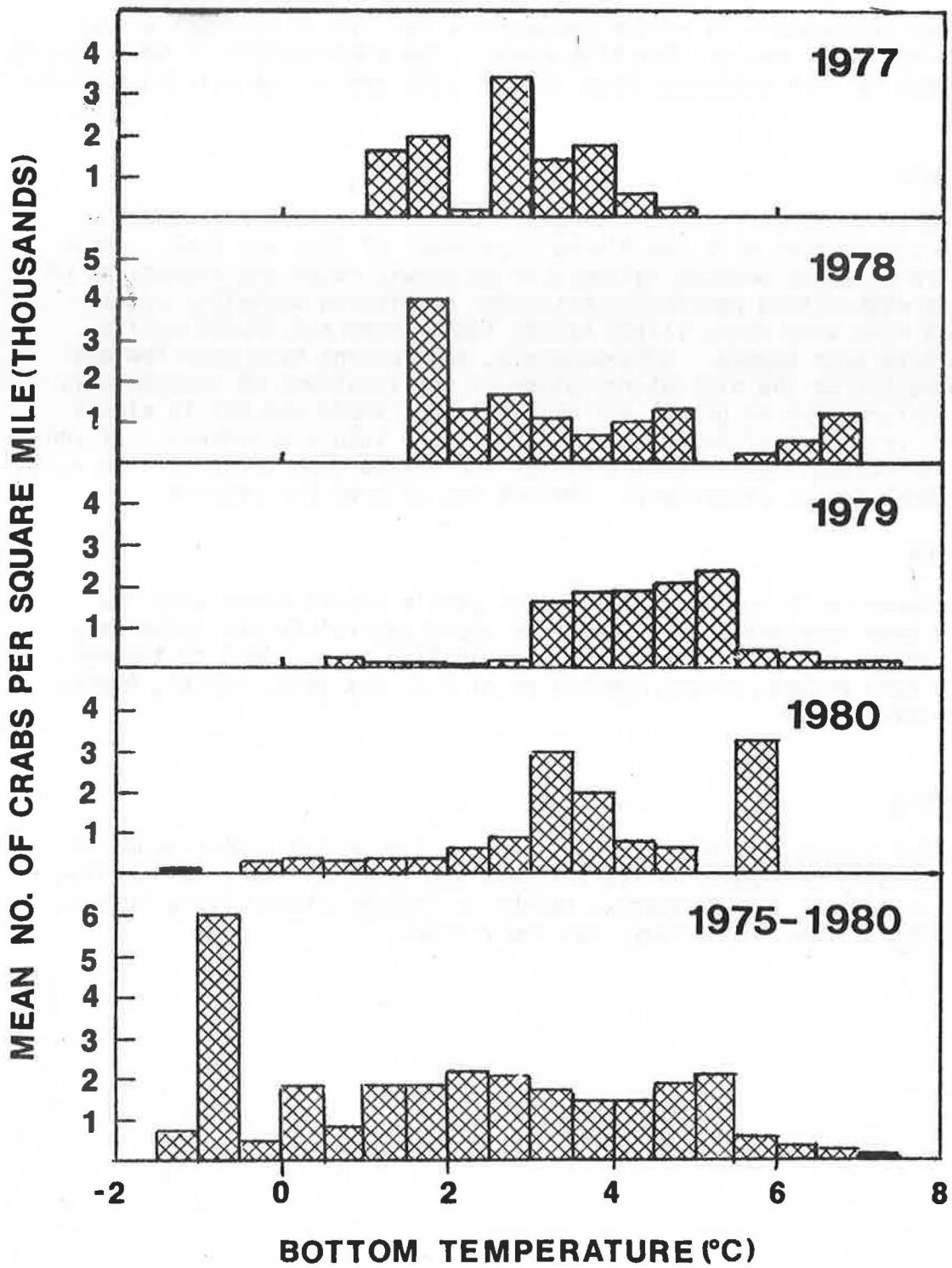


Figure 6. -- Average number of large-sized male Tanner crab (*Chionoecetes opilio*) per square mile found at various bottom temperatures in the 1975-1980 NMFS Bering Sea surveys. Data Are summarized in 0.5 degree intervals.

The above differences in bottom temperature had little apparent effect on the distribution of red or blue king crabs. The distribution of both species of Tanner crabs is very different from 1979 to 1980 and may be related to temperature.

#### Tagging Studies

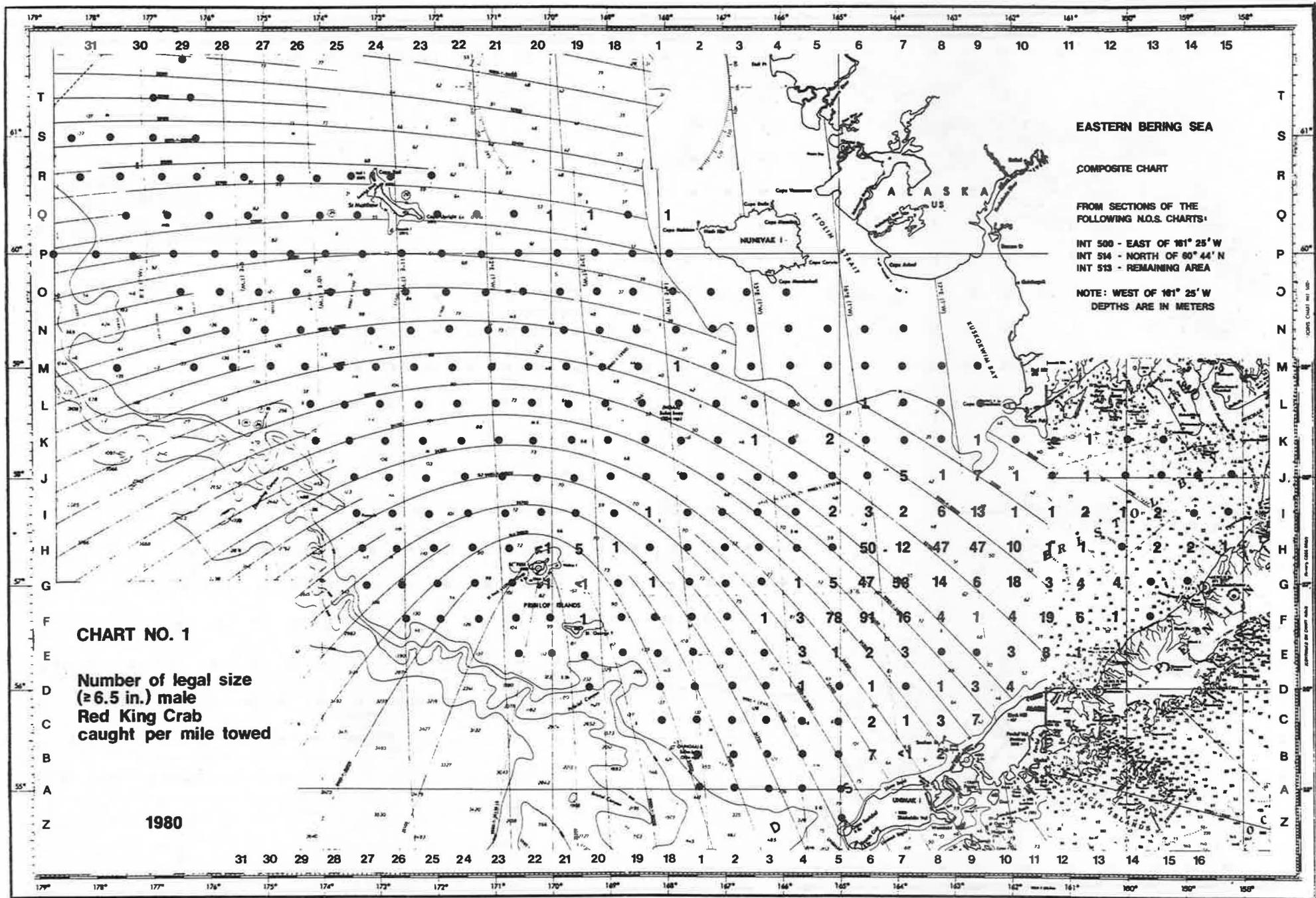
Starting in 1978, we initiated tagging studies of Tanner crab and blue king crab in cooperation with the Alaska Department of Fish and Game. These studies are intended to produce information on growth rates and migrations of these species rather than population estimates or fishing mortality rates. To date 7,508 blue king crab, 11,119 bairdi Tanner crab and 10,904 opilio Tanner crab have been tagged. Unfortunately, tag returns have been few and little information on the size at recapture or the locations of recapture is available. Information on growth and migration for these species is almost non-existent, yet of vital importance in predicting future abundance. If you find any marked crab, please contact either the Alaska Department of Fish and Game or the NMFS Kodiak Laboratory. Rewards are offered for returns.

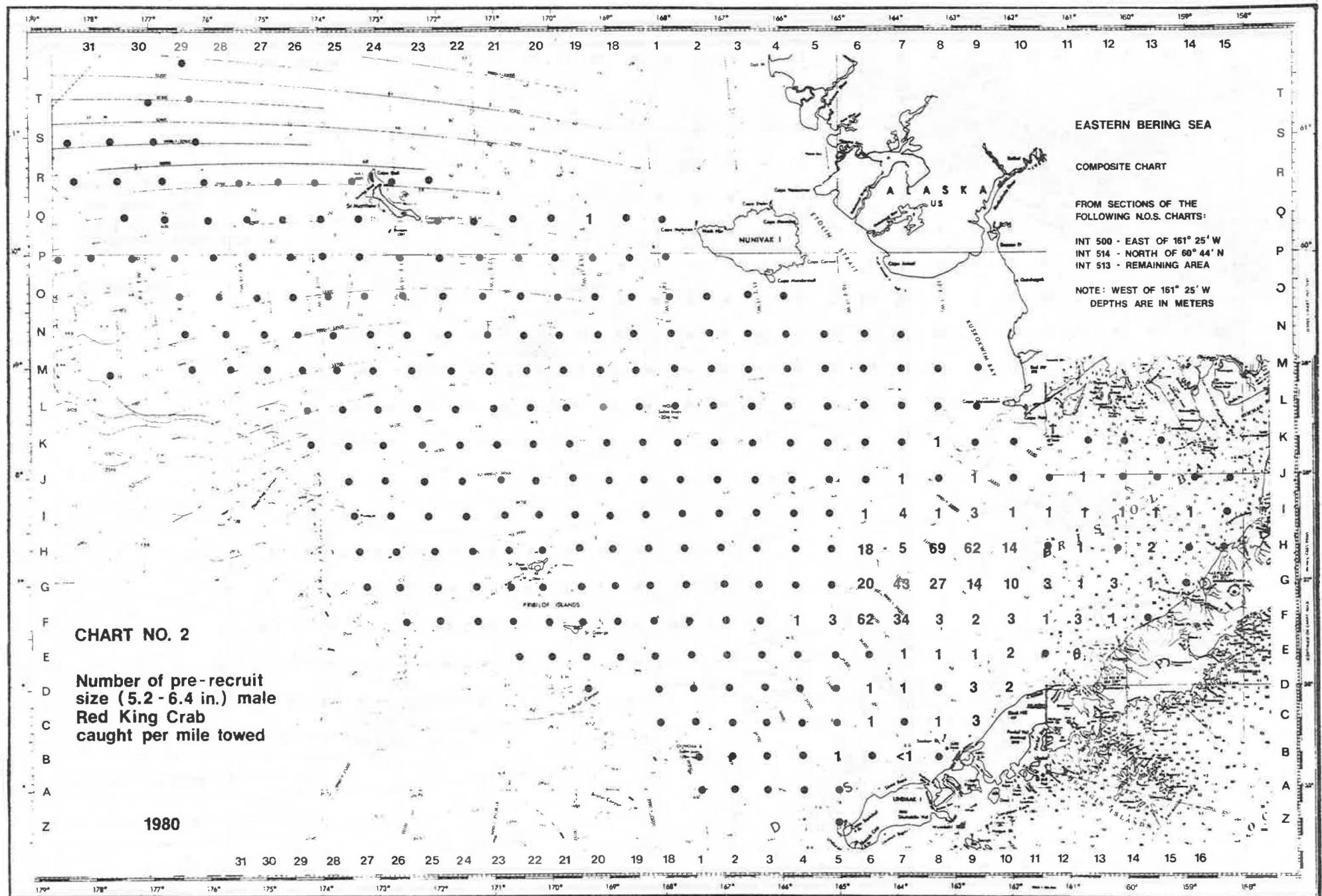
#### Questionnaires

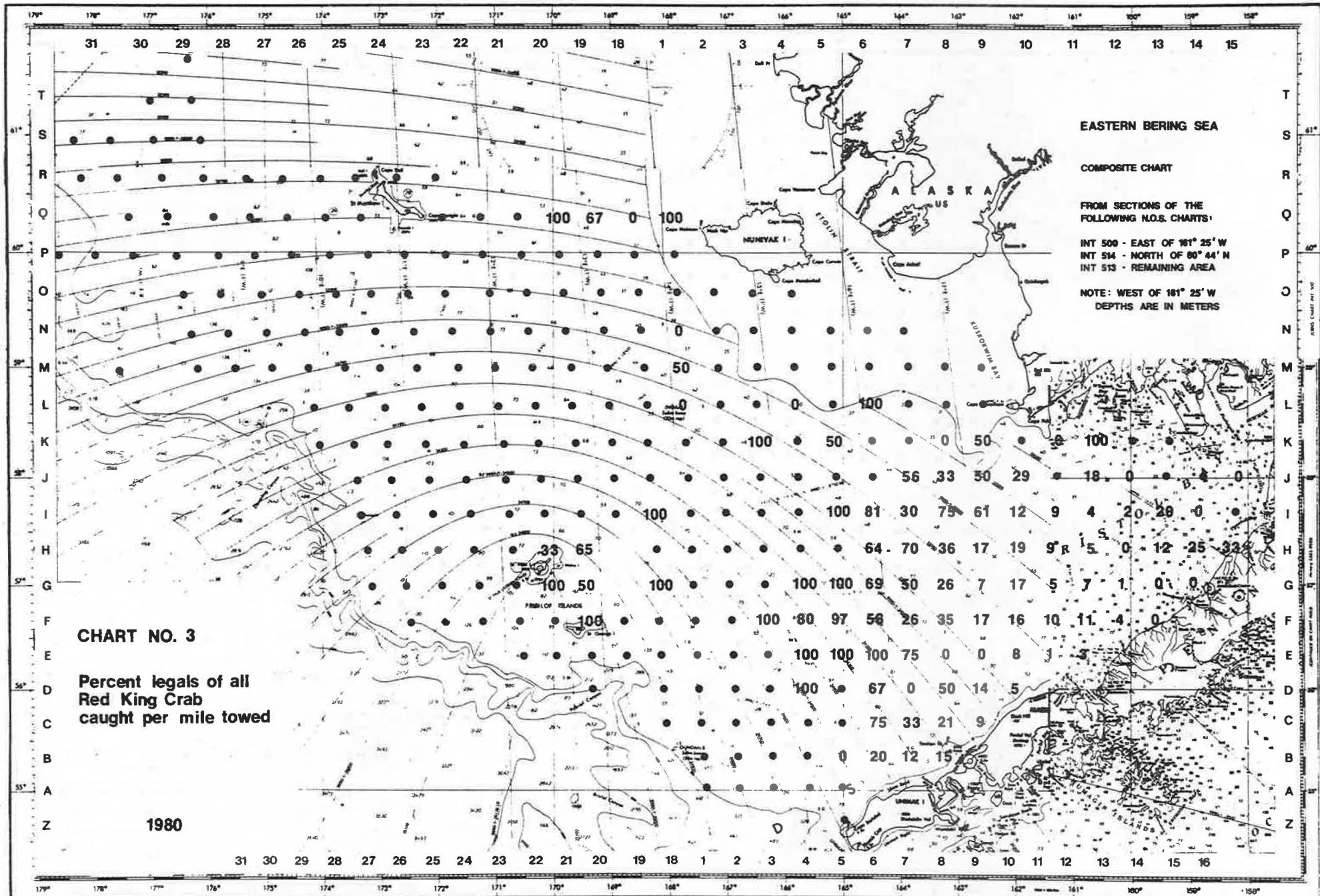
A questionnaire is not included in this year's report since very few returns have been received in the past. We would appreciate any commentary volunteered by our readers. Also, if you would like to be added to the mailing list for this report, please contact us at P.O. Box 1638, Kodiak, Alaska 99615, (907-487-4961).

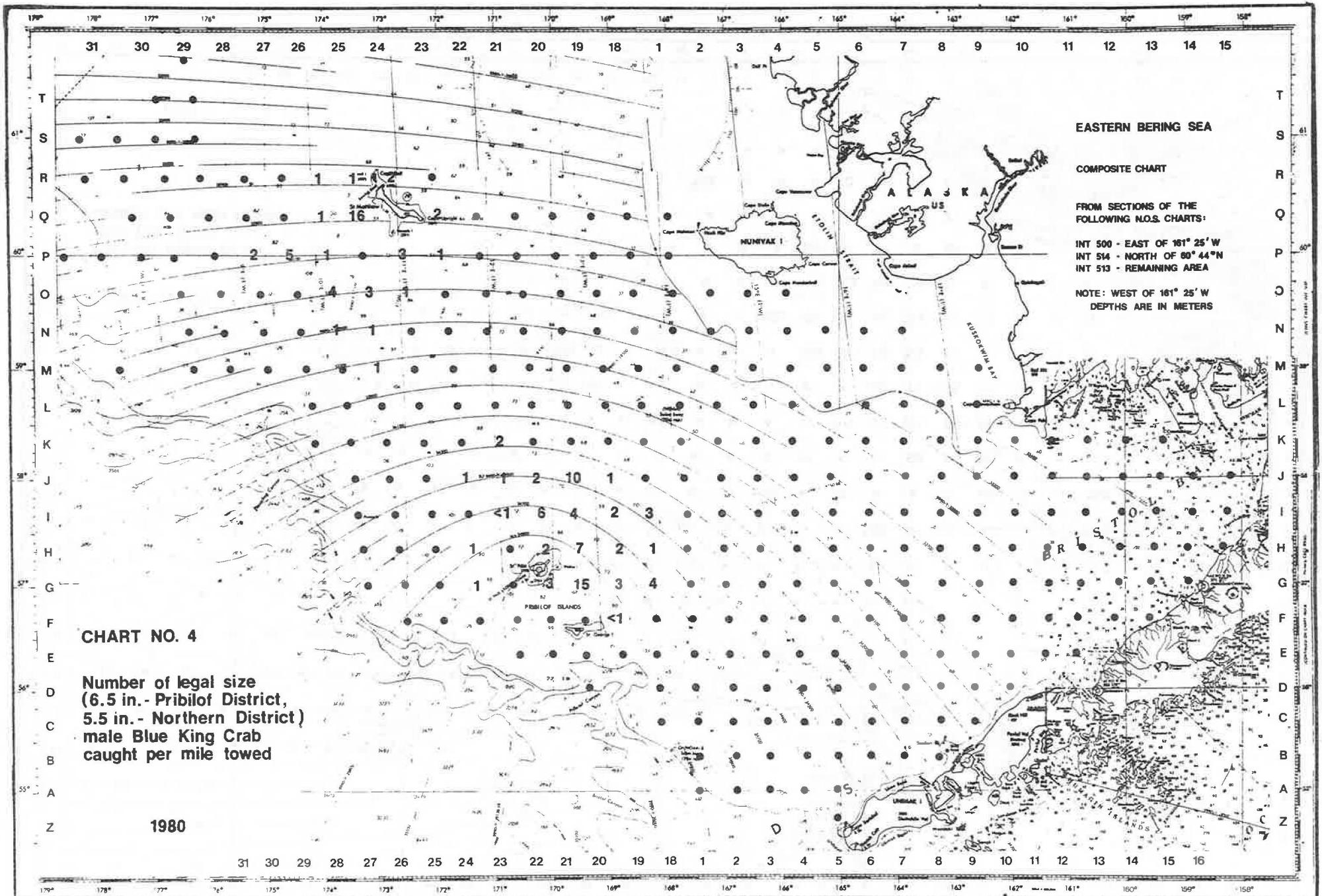
#### Acknowledgement

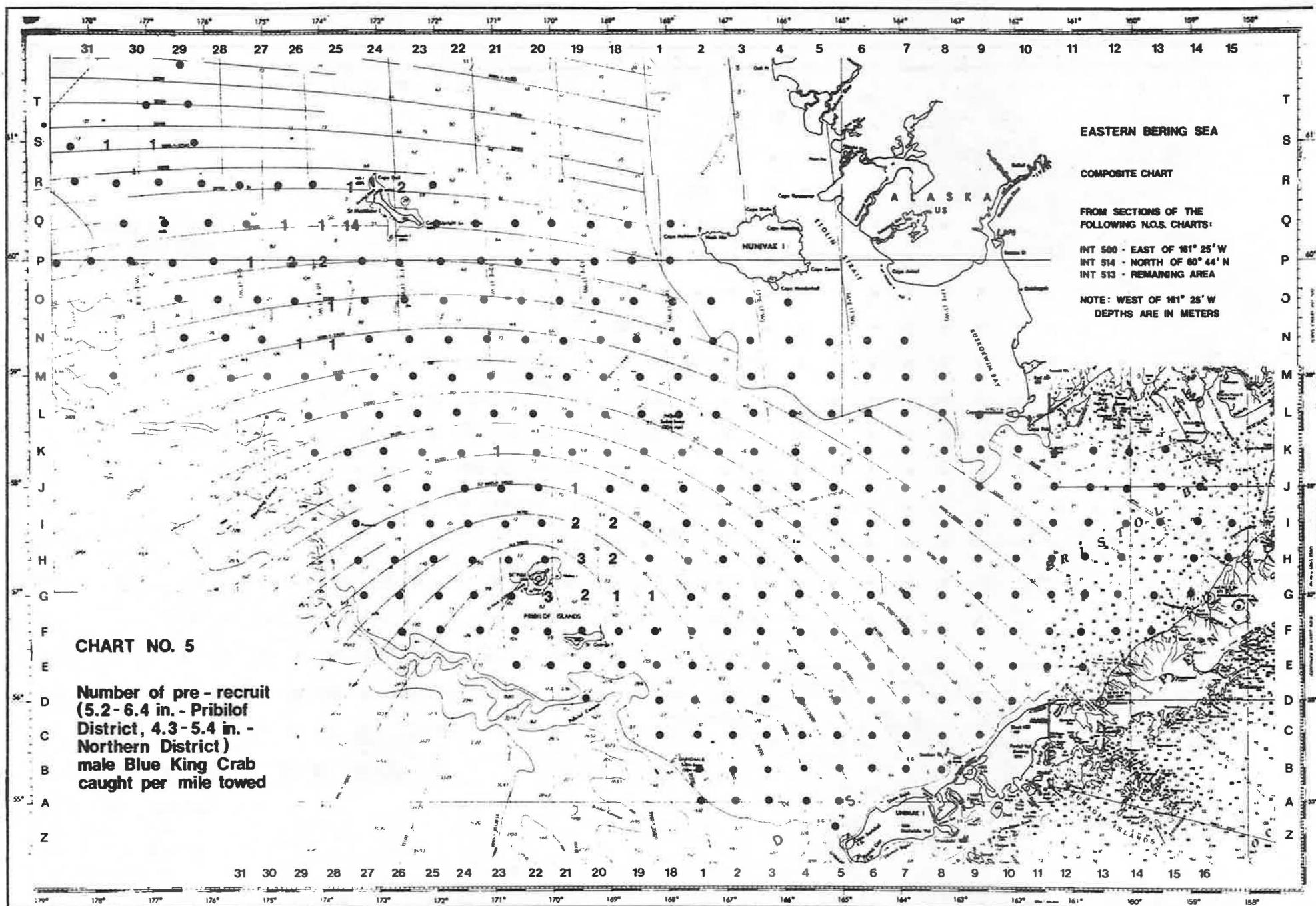
Successful completion of the annual eastern Bering Sea crab-groundfish survey is crucially dependent on the skippers and crews of the participating vessels. This year we extend special thanks to OREGON skipper Perry Buholm, OCEAN HARVESTER skipper Oluf Vedoy, and their crews.

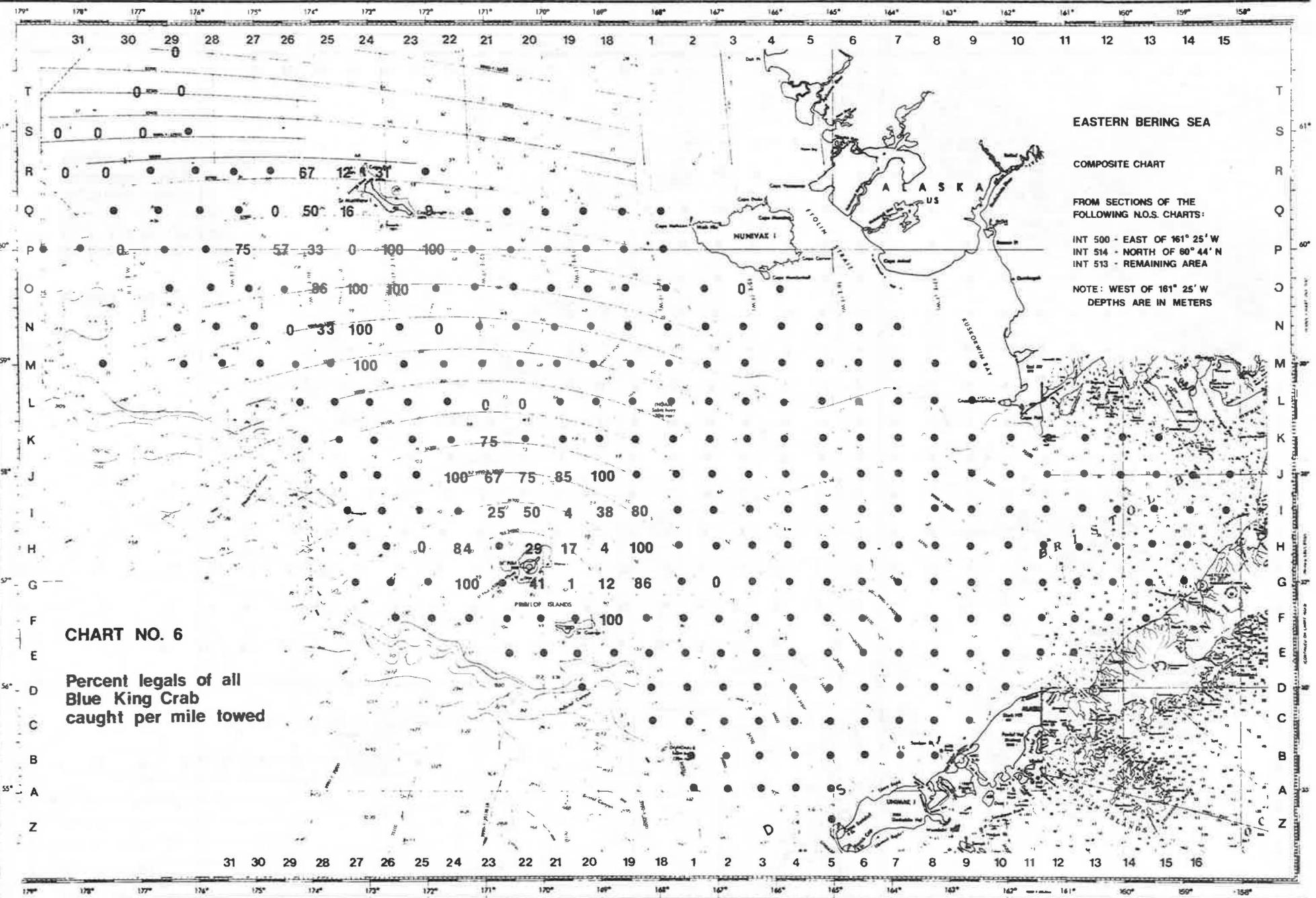


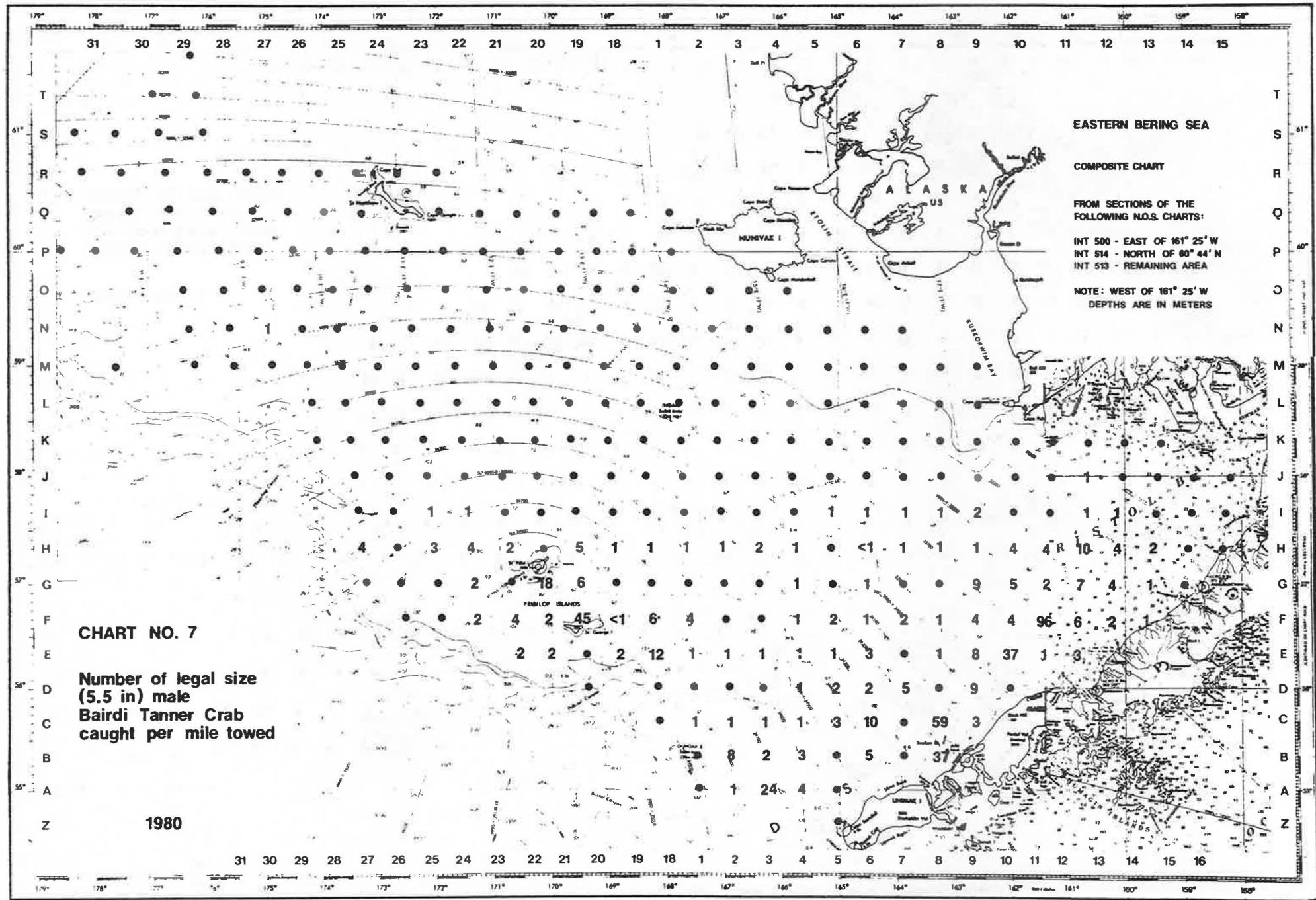


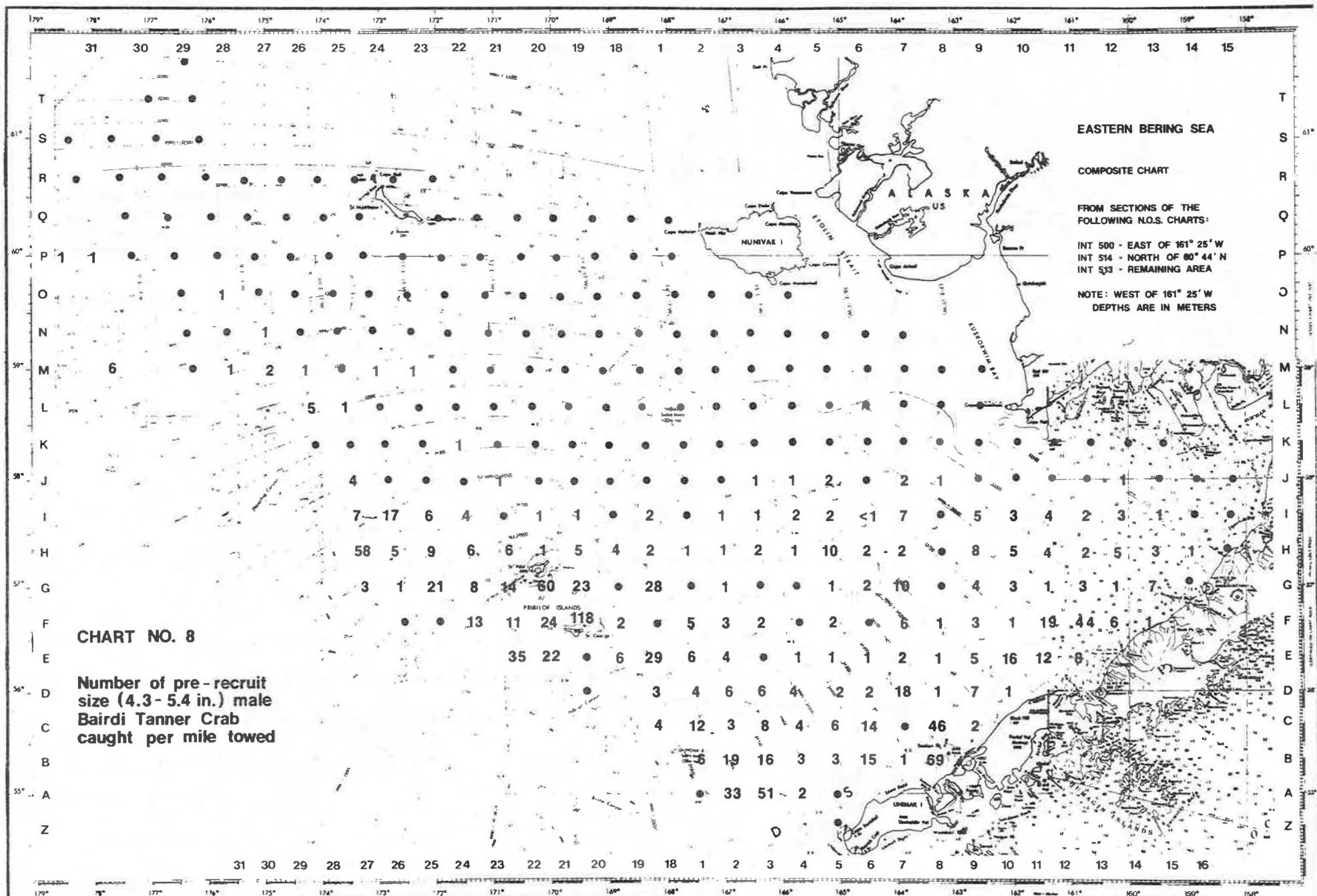


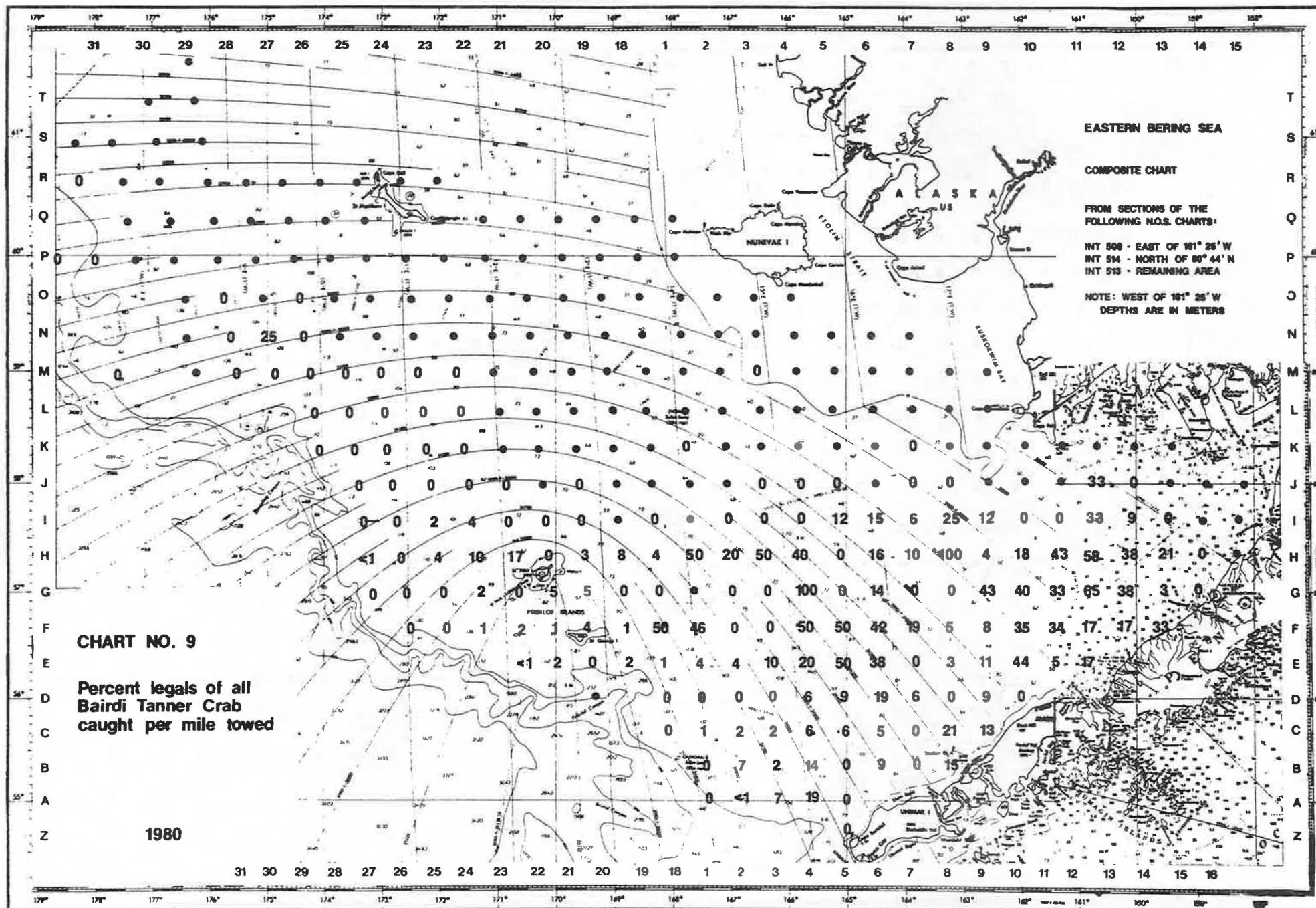


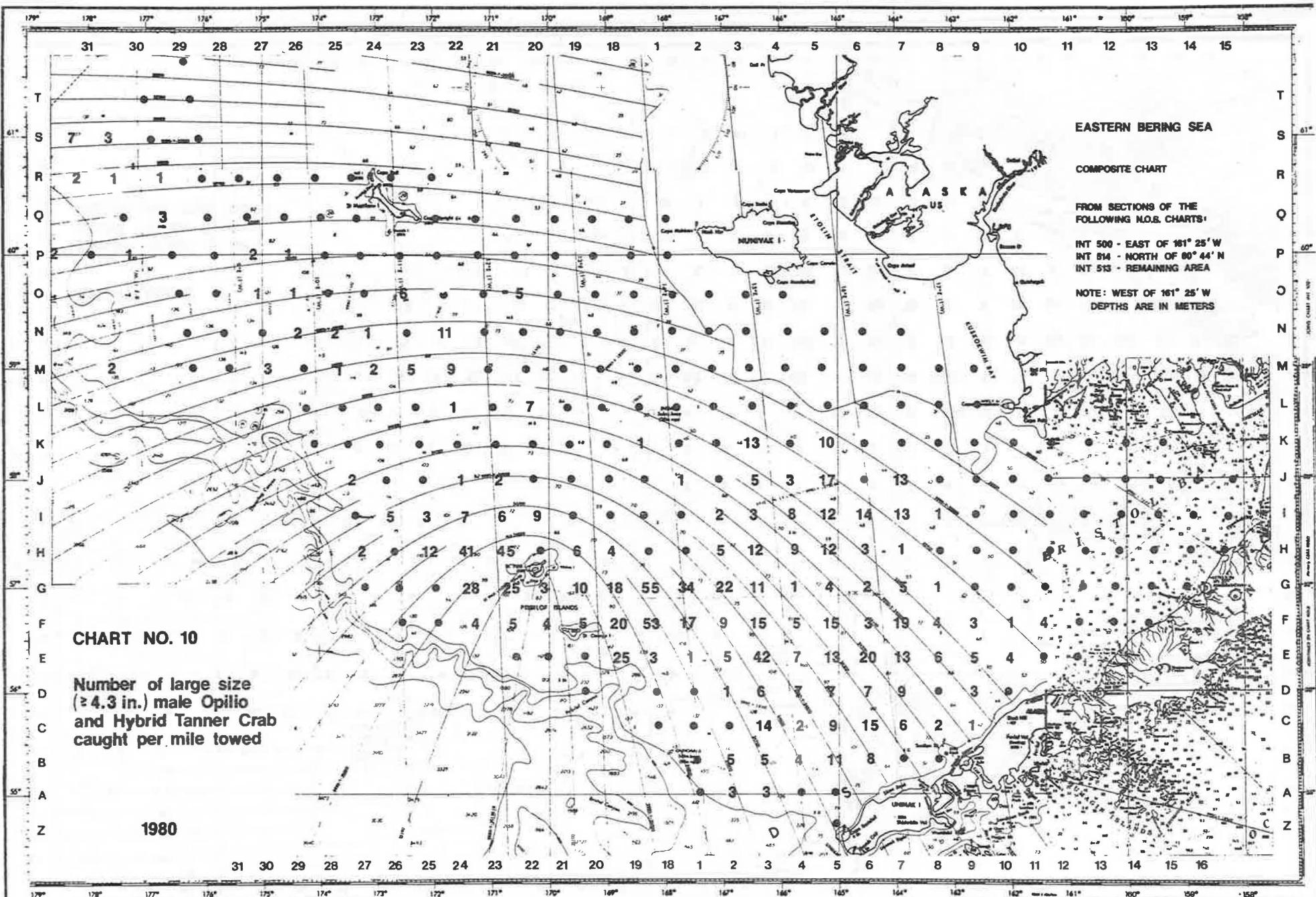


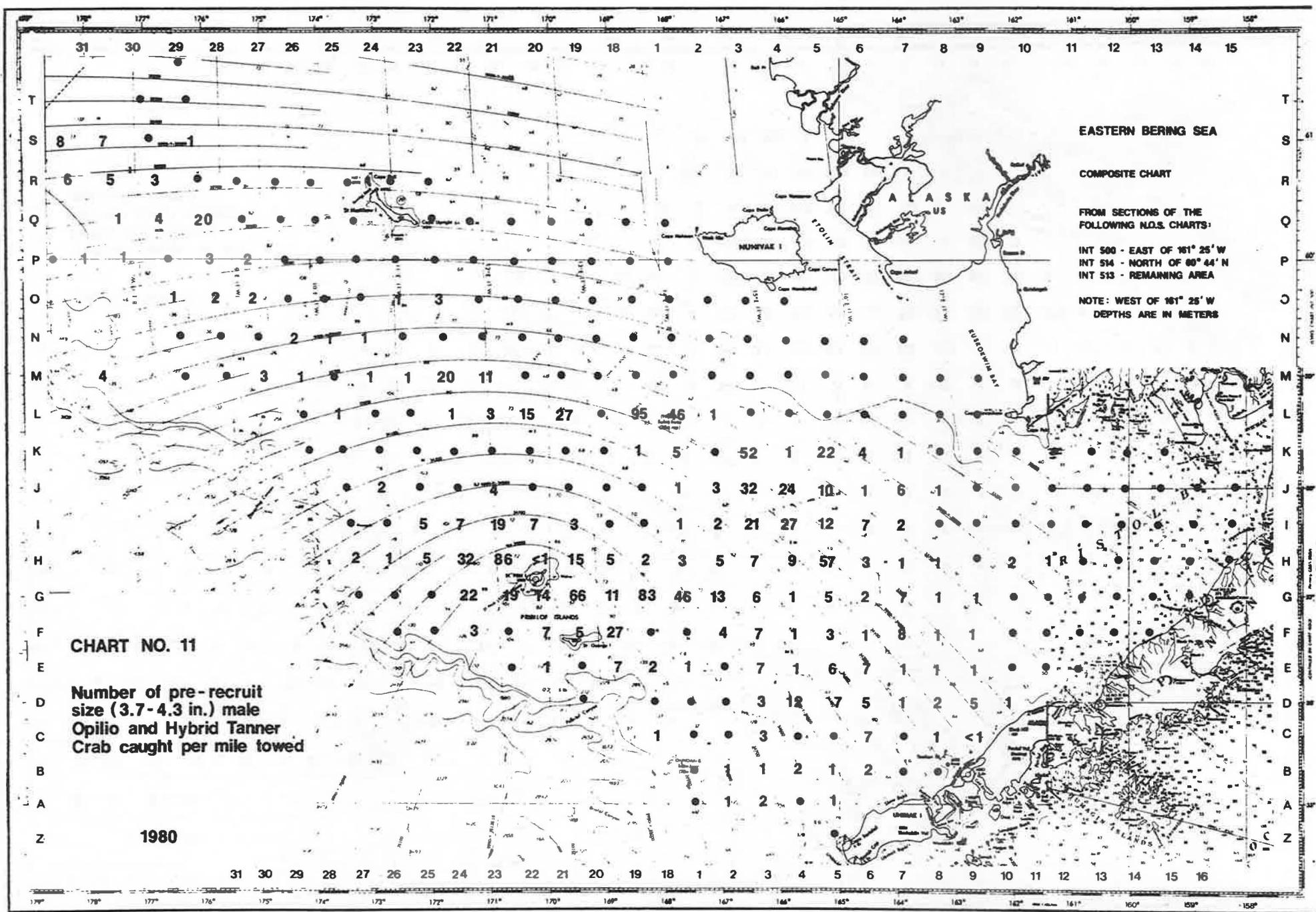


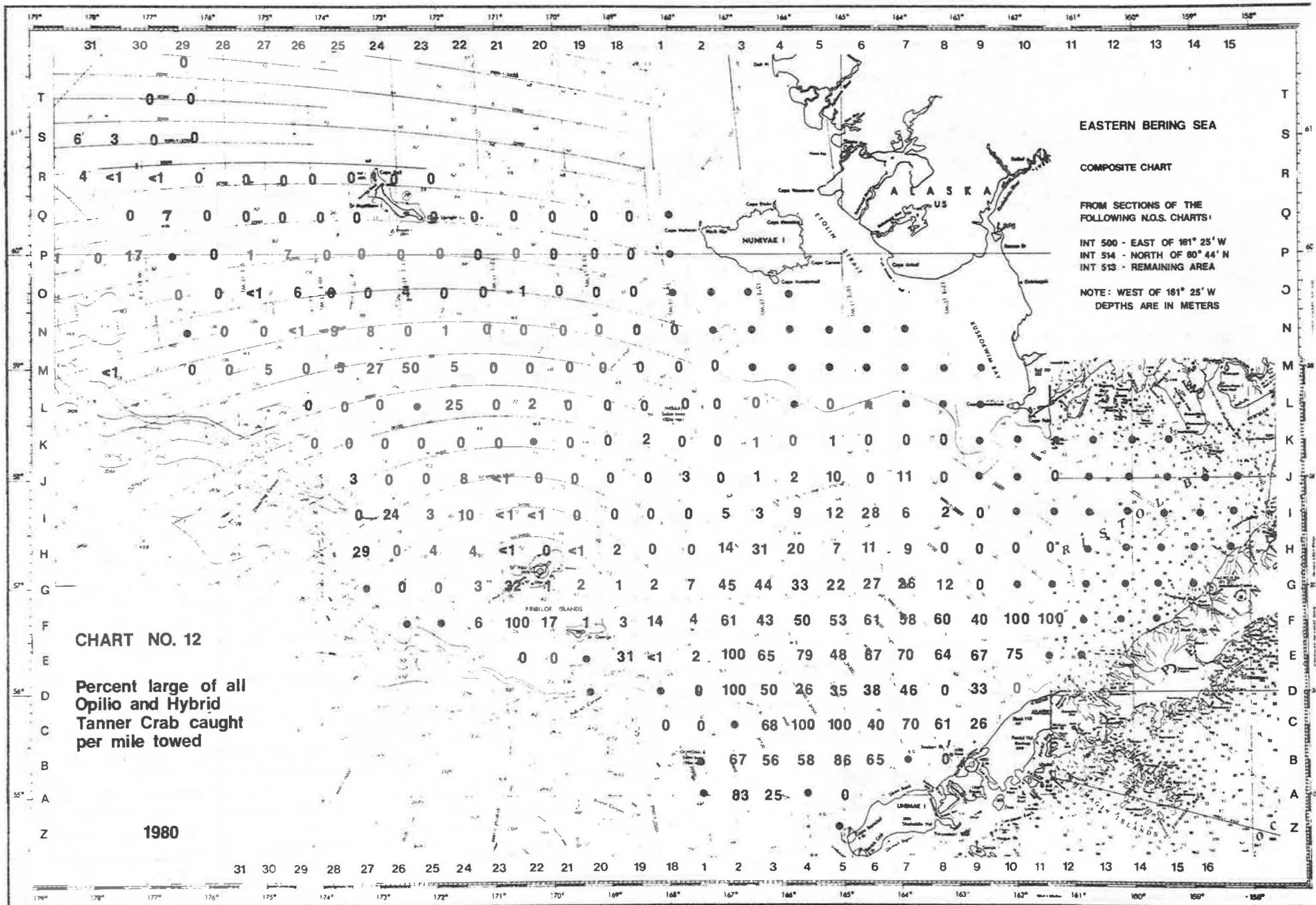












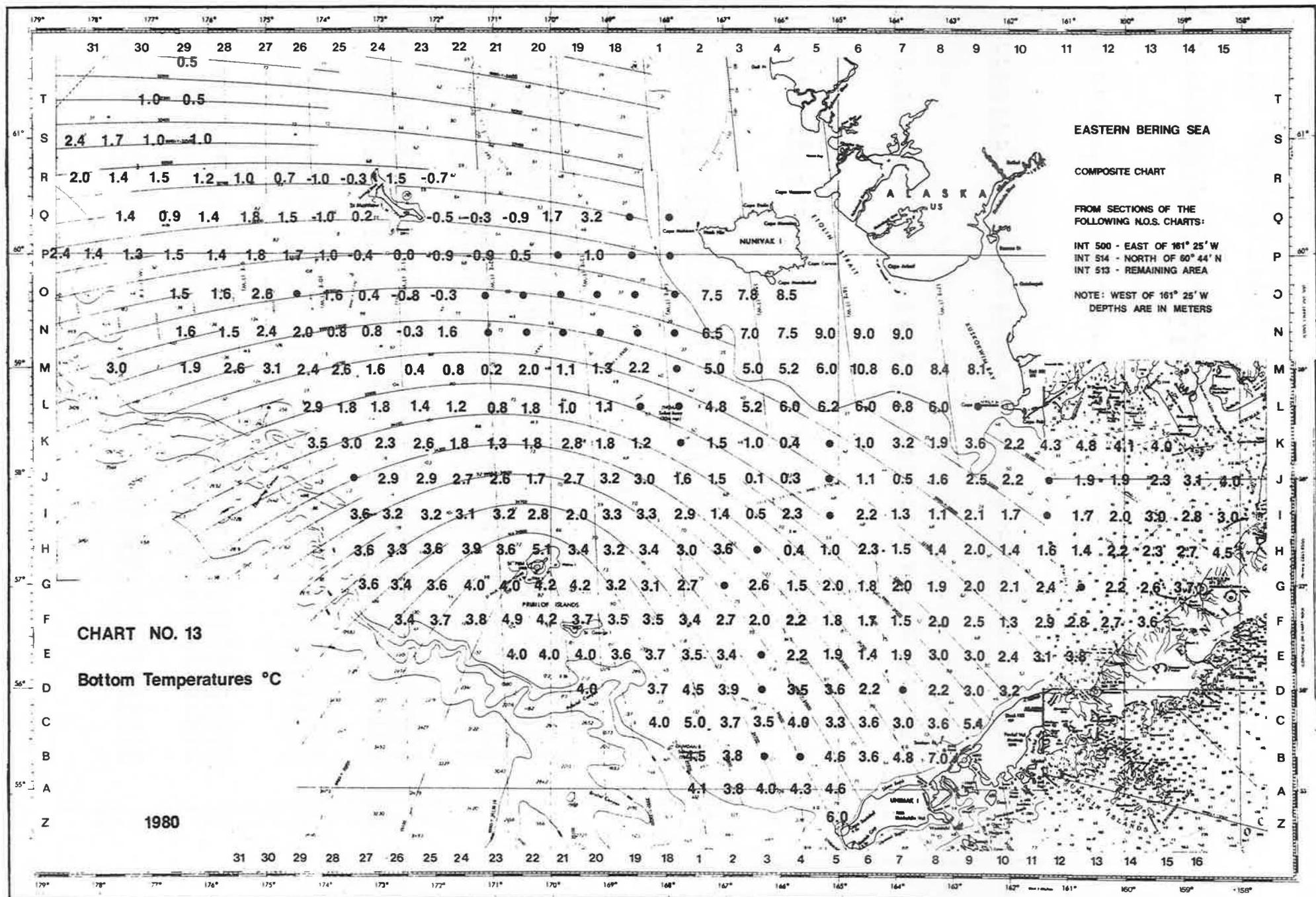


TABLE 3 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE RED KING CRAB WERE TAKEN

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LEGAL		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LEGAL				
805	06/22	55:21	165:10	X18428	Y48088	53	4.6	0.	0.	1.	1.	0.0		
306	06/22	55:23	164:35	X18448	Y47967	55	3.6	27.	0.	0.	7.	20.5		
307	06/22	55:20	164:00	X18465	Y47655	41	4.0	1.	0.	0.	1.	2.0		
807	07/07	55:20	164:01	Y34336	Z47657	38	5.6	4.	0.	1.	0.	5.0		
808	05/31	55:20	163:25	X47430	Y34243	23		22.	0.	0.	3.	12.9		
808	07/07	55:22	163:26	Y34246	Z47434	25	7.0	1.	0.	0.	1.	2.0		
C06	05/27	55:40	164:36	X47894	Y34558	51	3.6	0.	0.	1.	2.	75.0		
C07	05/23	55:41	165:00	X47661	Y34264	50	3.0	2.	0.	0.	1.	2.0		
C08	05/31	55:40	163:24	X47430	Y34171	42	3.2	10.	0.	1.	3.	21.4		
C08	07/07	55:40	163:24	Y34172	Z47432	42	4.0	8.	0.	1.	2.	21.4		
C09	05/31	58:40	162:51	X47214	Y34085	27	3.9	108.	33.	6.	14.	161.8.7		
C09	07/07	55:40	162:52	Y34090	Z47228	29	7.0	2.	1.	0.	0.	2.0		
D04	05/12	56:00	165:47	X18552	Y34501	59	3.5	0.	0.	0.	1.	100.0		
D06	05/16	56:00	164:35	Y34286	Z47391	50	2.2	0.	0.	1.	1.	66.7		
D07	05/28	55:59	163:59	X47670	Y34198	43		0.	0.	1.	0.	1.0		
D08	05/16	56:00	163:24	Y34097	Z47439	48	2.2	1.	0.	0.	1.	50.0		
D09	05/31	58:00	162:49	X47207	Y34001	42	3.0	13.	1.	3.	3.	19.14.3		
D10	05/18	56:00	162:14	Y35910	Z46976	39	3.2	61.	2.	2.	4.	68.5.2		
E04	05/13	55:20	165:48	X18617	Y34429	51	2.2	0.	0.	0.	3.	100.0		
E05	05/27	56:20	165:12	X48155	Y34323	46	1.9	0.	0.	0.	1.	100.0		
E06	05/16	56:21	164:35	X18631	Y34195	47	1.4	0.	0.	0.	2.	100.0		
E07	05/28	55:20	164:01	X47682	Y34114	45	1.9	0.	0.	1.	3.	75.0		
E08	05/16	56:19	163:23	Y34011	Z47435	48	3.0	0.	0.	1.	0.	1.0		
E09	05/31	56:20	162:49	X47198	Y33911	42	3.0	5.	0.	1.	0.	5.0		
E10	05/18	56:20	162:12	Y33813	Z46958	43	2.4	29.	8.	2.	3.	41.7.6		
E11	05/29	56:20	161:38	Y33731	Z46733	35	3.1	647.	338.	0.	8.	993.0.8		
E12	05/29	56:20	161:00	Y33637	Z46480	29	3.8	5.	13.	6.	1.	25.2.7		
F03	05/23	56:40	166:26	X48652	Y34464	45	2.0	0.	0.	0.	1.	100.0		
F04	05/13	56:40	165:50	X13668	Y34350	43	2.2	0.	0.	1.	3.	80.0		
F05	05/27	56:40	165:14	X48169	Y34326	40	1.4	0.	0.	3.	78.	81.96.6		
F06	05/15	56:40	164:36	X18672	Y34114	41	1.4	0.	3.	48.	113.	163.69.0		
F06	07/06	56:40	164:36	Y34123	Z47918	40	2.0	0.	3.	76.	70.	149.46.9		
F07	05/28	55:40	164:00	X48678	Y34918	40	1.5	1.	12.	34.	16.	63.26.1		
F08	05/18	56:40	163:23	Y33914	Z47431	41	2.0	1.	3.	3.	4.	11.35.3		
F09	05/31	55:40	162:47	X47191	Y33816	38	2.5	4.	1.	2.	1.	9.16.7		
F10	05/18	56:40	162:11	Y33721	Z46947	39	1.3	17.	1.	3.	4.	25.15.8		
F11	05/20	56:40	161:35	Y33629	Z46708	50	2.9	165.	4.	1.	19.	189.10.2		
F12	05/28	56:39	160:59	Y33540	Z46466	38	2.8	46.	4.	3.	6.	59.10.6		
F13	05/28	56:40	160:22	Y33450	Z46218	32	2.7	14.	0.	1.	1.	15.4.0		
F14	05/28	56:40	159:46	Y33368	Z45976	19	3.6	1.	0.	0.	0.	1.0.0		
F20	J6/10	56:31	169:48	X49879	Y35105	46	3.7	0.	0.	0.	1.	1.100.0		
G04	05/13	57:00	165:51	X18709	Y34250	41	1.5	0.	0.	0.	1.	1.100.0		
G05	05/26	57:00	165:13	X43165	Y34131	37	2.0	0.	0.	0.	5.	5.100.0		
G06	05/15	57:00	164:36	X18707	Y34007	37	1.7	0.	0.	2.	27.	29.93.5		
G06	07/06	57:00	164:36	Y34014	Z47916	37	2.0	1.	2.	38.	68.	108.62.4		

NOTE: PRE-RECRUIT = 5.2-6.4 IN. WIDTH; LEGAL = GREATER THAN 6.4 IN. WIDTH

TABLE 3 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE RED KING CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED				PERCENT LEGAL		
							MALES (SEE NOTE)						
							FEMALES	SMALL	PRERECRUIT	LEGAL			
G07	05/28	57:00	164:00	X47672	Y33913	36	2.0	4.	5.	43.	53.	105.	50.5
G08	05/19	57:00	163:22	Y33806	Z47423	36	1.9	3.	11.	27.	14.	55.	25.6
G09	05/30	57:00	162:47	X47194	Y33709	31	2.0	29.	32.	14.	6.	81.	7.4
G10	05/20	56:59	162:10	Y33615	Z46936	34	2.1	60.	14.	10.	18.	102.	17.3
G11	05/20	57:20	163:22	Y33692	Z47412	29	2.4	44.	12.	3.	3.	63.	5.0
G12	05/20	56:59	160:56	Y33432	Z46442	35		48.	4.	1.	4.	57.	6.6
G13	05/28	57:00	160:20	Y33345	Z46200	33	2.2	180.	120.	3.	4.	308.	1.4
G14	05/27	56:59	159:42	Y33261	Z45947	30	2.6	3.	1.	1.	0.	5.	0.0
G15	05/27	56:59	159:07	Y33184	Z45711	16	3.7	225.	203.	0.	0.	428.	0.0
G18	06/20	57:00	168:20	Y34757	Z49416	44	3.1	0.	0.	0.	1.	1.	100.0
G20	06/09	56:59	169:23	X49899	Y35025	42	4.5	1.	0.	0.	1.	2.	50.0
G21	06/15	57:00	170:10	X18686	Y35132	37	4.5	0.	0.	0.	2.	2.	100.0
H06	05/15	57:19	164:37	X18732	Y33394	36	2.3	1.	0.	0.	7.	7.	92.9
H06	07/06	57:20	164:38	Y33906	Z47918	74	2.3	0.	18.	37.	94.	149.	63.1
H07	05/29	57:19	164:00	X47665	Y33799	33	1.5	0.	0.	5.	12.	18.	70.0
H08	05/19	57:00	161:34	Y33521	Z46693	37	1.4	0.	13.	69.	47.	129.	36.3
H09	05/30	57:20	162:46	X47170	Y33594	25	2.0	59.	109.	62.	47.	277.	17.0
H10	05/20	57:20	162:09	Y33497	Z46920	28	1.4	19.	10.	14.	10.	52.	19.1
H11	05/20	57:20	161:32	Y33404	Z46672	30	1.6	6.	0.	0.	1.	7.	9.1
H12	05/26	57:20	160:55	Y33319	Z46430	35	1.4	25.	1.	1.	1.	28.	4.8
H13	05/26	57:20	160:17	Y33230	Z46175	32	2.2	13.	1.	0.	0.	15.	0.0
H14	05/26	57:20	159:39	Y33146	Z45920	30	2.3	10.	0.	2.	2.	14.	12.0
H15	05/27	57:20	159:03	Y33096	Z45678	26	2.7	4.	1.	0.	2.	7.	25.0
H16	05/27	57:19	158:17	Y32997	Z45373	11	4.5	1.	1.	0.	1.	2.	33.3
H19	06/03	57:10	169:19	X49803	Y34915	36	3.1	2.	0.	0.	1.	3.	33.3
H19	06/12	57:20	168:59	Y34765	Z49646	39	3.4	0.	0.	0.	1.	1.	100.0
H20	06/03	57:20	169:36	X49896	Y34905	33	2.9	0.	0.	0.	1.	1.	100.0
H20	06/10	57:10	169:54	X50337	Y35049	25	3.8	6.	0.	0.	10.	16.	63.2
H21	06/13	57:20	170:12	X18714	Y35003	29	5.1	1.	1.	0.	1.	3.	33.3
I05	05/26	57:39	165:15	X48142	Y33885	33		0.	0.	0.	2.	2.	100.0
I06	05/15	57:39	164:37	Y33772	Z47392	29	0.8	0.	0.	0.	1.	1.	100.0
I06	07/06	57:40	164:38	Y33774	Z47997	22	7.5	0.	0.	2.	6.	7.	77.8
I07	05/29	57:39	163:59	X47644	Y33669	27	1.3	2.	0.	4.	2.	8.	30.0
I08	05/19	57:40	163:21	Y33562	Z47392	26	1.1	1.	0.	1.	6.	8.	75.0
I09	05/30	57:40	162:45	X47147	Y33461	23	2.1	4.	2.	3.	13.	21.	60.9
I10	05/20	57:40	162:08	Y33372	Z46902	26	1.7	6.	1.	1.	1.	10.	11.8
I11	05/20	57:40	161:29	Y33279	Z46649	29		7.	5.	1.	1.	14.	9.1
I12	05/26	57:40	160:52	Y33193	Z46402	31	1.7	26.	17.	1.	2.	46.	4.1
I13	05/26	57:40	160:16	Y33111	Z46159	30	2.0	23.	19.	1.	1.	43.	1.7
I14	05/25	57:40	159:37	Y35029	Z45907	26	3.0	5.	2.	1.	2.	9.	20.0
I15	05/25	57:40	159:01	Y32953	Z45663	26	2.9	0.	0.	1.	0.	1.	0.0
I13	06/13	57:40	168:24	Y34482	Z49371	38	3.3	0.	0.	0.	1.	1.	100.0
J07	05/29	58:00	164:00	X47629	Y33527	24	0.5	3.	0.	1.	5.	8.	55.6
J08	05/19	58:00	163:21	Y33422	Z47371	23	1.6	1.	0.	0.	1.	2.	33.3
J09	05/30	58:00	162:44	X47133	Y33326	21	2.5	5.	1.	1.	7.	14.	50.0

NOTE: PRE-RECRUIT = 5.2-6.4 IN. WIDTH; LEGAL = GREATER THAN 6.4 IN. WIDTH

TABLE 3 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE RED KING CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED				TOTAL	PERCENT LEGAL		
							MALES (SEE NOTE)							
							FEMALES	SMALL	PRERECRUIT	LEGAL				
J10	05/20	58:00	162:07	Y33235 Z46885	20	2.2	3.	0.	0.	1.	4.	28.6		
J12	05/22	58:00	160:50	Y33062 Z46384	24	1.9	5.	0.	1.	1.	7.	18.2		
J13	05/22	58:00	160:12	Y32980 Z46136	27	1.9	3.	1.	0.	0.	3.	0.0		
J16	05/24	57:59	158:19	Y32757 Z45391	18	4.0	47.	65.	0.	0.	112.	0.0		
K03	05/24	53:20	166:33	X48558 Y33785	25	1.0	0.	0.	0.	1.	1.	100.0		
K05	05/25	58:19	165:16	X48087 Y33576	23		2.	0.	0.	2.	4.	50.0		
K08	05/19	58:20	163:22	Y33279 Z47356	20	1.9	0.	0.	1.	0.	1.	0.0		
K09	05/29	58:20	162:43	X47107 Y33181	16	3.6	1.	0.	0.	1.	2.	50.0		
K11	05/22	58:20	161:23	Y33002 Z46595	17	4.3	1.	0.	1.	0.	1.	0.0		
K12	05/22	58:19	160:46	Y32922 Z46353	11	4.3	0.	0.	0.	1.	1.	100.0		
L01	06/07	58:40	167:52	Y33773 Z48937	25		1.	0.	0.	0.	1.	0.0		
L04	07/15	58:40	165:49	Y33483 Z48237	19	6.0	1.	0.	0.	0.	1.	0.0		
L06	07/15	59:40	164:34	Y33295 Z47780	20	6.0	0.	0.	0.	1.	1.	100.0		
M01	05/08	59:00	167:53	Y33565 Z48850	22		1.	0.	0.	1.	1.	50.0		
N01	06/08	59:20	167:55	Y33345 Z48768	21		0.	1.	0.	0.	1.	0.0		
Q01	05/08	60:20	167:59	Y32643 Z48510	17		0.	0.	0.	1.	1.	100.0		
Q18	06/09	60:20	168:41	Y32701 Z48680	19		0.	1.	0.	0.	1.	0.0		
Q19	07/05	60:20	169:20	Y32748 Z48922	23	3.2	0.	0.	1.	1.	2.	66.7		
Q20	07/05	60:20	170:02	Y32789 Z48961	29	1.7	0.	0.	0.	1.	1.	100.0		

NOTE: PRE-RECRUIT = 5.2-6.4 IN. WIDTH; LEGAL = GREATER THAN 6.4 IN. WIDTH

TABLE 4 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE BLUE KING CRAB WERE TAKEN

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED					TOTAL	PERCENT LEGAL		
							MALES (SEE NOTE)								
							FEMALES	SMALL	PRERECruit	LEGAL					
F19	06/20	56:40	168:54	Y34951	Z49613	56	3.5	0.	0.	0.	1.	1.	100.0		
G02	06/06	57:00	167:05	Y34488	Z48911	40		1.	0.	0.	0.	1.	0.0		
G18	06/20	57:00	169:20	Y34757	Z49416	44	3.1	0.	0.	1.	4.	4.	85.7		
G19	06/08	56:49	169:18	X49787	Y35004	42	3.0	11.	11.	3.	5.	29.	15.6		
G19	06/20	57:00	169:57	Y34890	Z49652	44	3.3	5.	7.	0.	1.	13.	5.3		
G20	06/09	56:59	169:33	X49899	Y35025	42	4.5	2222.	6.	5.	30.	2263.	1.3		
G20	06/10	56:50	169:55	X49996	Y35107	39	3.9	0.	2.	0.	0.	2.	0.0		
G21	06/15	57:00	170:10	X18686	Y35132	37	4.5	5.	0.	5.	7.	17.	40.9		
G23	07/23	57:09	171:26	-----	-----	57	4.0	0.	0.	0.	3.	3.	100.0		
G23	07/23	57:09	171:26	X18279	Y34945	57	4.0	0.	0.	0.	5.	3.	100.0		
H18	06/13	57:20	168:22	Y34638	Z49409	40	3.4	0.	0.	0.	1.	1.	100.0		
H19	06/08	57:10	169:19	X49803	Y34915	38	3.1	5.	3.	0.	3.	8.	0.0		
H19	06/12	57:20	168:59	Y34765	Z49646	39	3.4	38.	35.	5.	3.	81.	4.1		
H20	06/08	57:20	169:36	X49896	Y34905	33	2.9	4.	1.	2.	7.	14.	53.3		
H20	06/10	57:10	169:54	X50037	Y35049	25	3.8	42.	12.	4.	6.	63.	9.2		
H21	06/13	57:20	170:12	X18714	Y35003	29	5.1	7.	1.	1.	4.	13.	28.6		
H23	06/16	57:20	171:29	X18278	Y34864	54		0.	0.	0.	1.	1.	100.0		
H23	07/20	57:16	171:24	X18306	Y34904	55	4.2	0.	0.	0.	7.	7.	100.0		
H23	07/22	57:10	171:28	X18269	Y34934	57	3.8	1.	0.	0.	2.	2.	75.0		
H23	07/22	57:10	171:27	X18277	Y34937	57	3.8	0.	1.	0.	0.	1.	0.0		
H23	07/23	57:10	171:26	X18287	Y34940	57	4.0	0.	0.	0.	1.	1.	100.0		
H23	07/24	57:10	171:29	X18264	Y34933	57	3.8	0.	1.	0.	0.	1.	0.0		
H24	07/21	57:11	171:54	X18105	Y34862	60	3.8	0.	1.	0.	0.	1.	0.0		
I18	06/13	57:40	168:24	Y34482	Z49371	38	3.3	1.	0.	0.	0.	1.	0.0		
I19	06/13	57:40	163:02	Y34603	Z49602	37	3.3	0.	1.	2.	3.	3.	80.0		
I20	06/11	57:49	169:40	X18693	Y00705	37		4.	2.	3.	2.	5.	37.5		
I20	06/11	57:29	169:59	X18704	Y34870	36	2.0	170.	5.	1.	6.	182.	3.3		
I21	06/11	57:40	170:16	X18616	Y34755	39	2.1	7.	2.	1.	10.	20.	50.0		
I21	06/13	57:30	170:38	X18585	Y34880	41	3.6	1.	1.	0.	2.	4.	50.0		
I22	06/13	57:40	170:54	X18457	Y34744	45	3.0	2.	0.	0.	1.	3.	25.0		
J19	06/13	58:00	169:04	Y34398	Z49519	37	3.2	0.	0.	0.	1.	1.	100.0		
J20	06/11	57:50	169:57	X18623	Y00618	38		1.	0.	2.	15.	18.	83.3		
J20	06/13	58:00	169:42	Y34476	Z49701	38	2.7	0.	0.	1.	6.	6.	38.9		
J21	06/14	58:00	170:20	Y34514	Z49843	41	1.7	1.	0.	0.	2.	3.	75.0		
J22	06/13	57:50	171:16	X19321	Y34606	49	3.0	0.	1.	0.	0.	1.	0.0		
J22	06/14	58:00	170:58	Y34512	Z49938	47	2.2	0.	0.	0.	2.	2.	100.0		
J23	06/14	58:00	171:36	Y34473	Z49994	53	2.7	0.	0.	0.	1.	1.	100.0		
K22	06/15	59:20	171:01	Y34277	Z49322	45	1.3	0.	0.	1.	2.	3.	75.0		
L21	06/16	58:40	170:26	Y34029	Z49605	40	1.8	0.	1.	0.	0.	1.	0.0		
L22	06/16	58:40	171:05	Y34036	Z49708	45	0.8	0.	1.	0.	0.	1.	0.0		
M25	06/25	59:00	173:05	Y33745	Z49794	59	1.6	0.	0.	0.	1.	1.	100.0		
N23	06/24	59:20	171:50	Y33560	Z49573	44	1.6	1.	0.	0.	0.	1.	0.0		
N25	06/25	59:20	173:09	Y33529	Z49701	55	0.8	0.	0.	0.	1.	1.	100.0		
N26	06/25	59:20	173:48	Y33499	Z49745	60	0.8	0.	1.	1.	1.	2.	33.3		
N27	06/30	59:19	174:27	X17239	Y33474	64	2.0	0.	0.	1.	0.	1.	0.0		

NOTE: PRE-RECRUIT = 5.2-6.4 IN. WIDTH; LEGAL = GREATER THAN 6.4 IN. WIDTH FOR AREA S. OF 58:39N  
 PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH FOR AREA N. OF 58:39N

TABLE 4 DATA FROM THE 1950 EASTERN BERING SEA TRAHL SURVEY WHERE BLUE KING CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED				PERCENT LEGAL	
							MALES (SEE NOTE)					
							FEMALES	SMALL	PRERECRUIT	LEGAL		
003	07/17	59:40	166:24	Y32950 Z48240	15	7.8	2.	0.	0.	0.	2. 0.0	
024	06/24	59:40	172:34	Y33323 Z49547	46	-0.8	0.	0.	0.	1.	1. 100.0	
025	06/24	59:40	173:14	Y33311 Z49610	52	0.4	0.	0.	0.	3.	3. 100.0	
026	06/24	59:40	173:52	Y33294 Z49659	67	1.6	0.	0.	1.	4.	5. 85.7	
P23	07/04	60:03	171:57	Y3308° Z49370	36	-0.9	0.	0.	0.	1.	1. 100.0	
P24	07/13	60:00	172:38	Y33093 Z49452	36	0.0	0.	0.	0.	3.	3. 100.0	
P25	07/13	60:00	173:18	Y33092 Z49517	40	-0.4	0.	3.	0.	0.	3. 0.0	
P26	07/13	60:00	173:56	Y33084 Z49572	52	1.9	0.	0.	2.	1.	4. 33.3	
P27	07/12	60:00	174:36	Y33067 Z49618	59	1.7	0.	1.	2.	5.	8. 57.1	
P28	07/12	60:00	175:16	Y33050 Z49658	64	1.3	0.	0.	1.	2.	2. 75.0	
P31	07/11	60:00	177:12	Y32982 Z49743	76	1.3	0.	1.	0.	0.	1. 0.0	
Q23	07/05	60:20	172:04	Y32865 Z49283	32	-0.5	5.	15.	0.	2.	23. 8.8	
Q25	07/13	60:19	173:24	Y32877 Z49430	32	0.2	28.	45.	14.	16.	103. 15.5	
Q26	07/13	60:19	174:04	Y32875 Z49490	50	-1.0	0.	0.	1.	1.	1. 50.0	
Q27	07/12	60:20	174:42	Y32864 Z49537	56	1.5	0.	0.	1.	0.	1. 0.0	
R24	07/07	60:40	172:47	Y32656 Z49278	24	1.5	1.	2.	2.	2.	8. 30.8	
R25	07/07	60:40	173:28	Y32658 Z49342	36	-0.3	0.	4.	1.	1.	6. 12.5	
R26	07/07	60:40	174:08	Y32671 Z49412	43	-1.0	0.	1.	0.	1.	2. 66.7	
R31	07/10	60:40	177:29	Y32631 Z49609	79	1.4	1.	0.	0.	0.	1. 0.0	
R32	07/10	50:40	178:10	Y32612 Z49636	89	2.0	0.	1.	0.	0.	1. 0.0	
S30	07/09	61:00	176:58	Y32461 Z49510	55	1.0	1.	0.	1.	0.	1. 0.0	
S31	07/09	61:00	177:38	Y32457 Z49543	74	1.7	1.	0.	1.	0.	2. 0.0	
S32	07/09	60:59	173:18	Y32454 Z49573	86	2.4	1.	1.	0.	0.	1. 0.0	
T29	07/08	61:20	176:18	Y32274 Z49390	58	0.5	0.	1.	0.	0.	1. 0.0	
T30	07/09	61:20	176:56	Y32282 Z49432	64	1.0	1.	0.	0.	0.	1. 0.0	
U29	07/08	61:39	176:28	Y32096 Z49323	58	0.5	0.	1.	0.	0.	1. 0.0	

NOTE: PRE-RECRUIT = 5.2-6.4 IN. WIDTH; LEGAL = GREATER THAN 6.4 IN. WIDTH FOR AREA S. OF 58:39N  
 PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH FOR AREA N. OF 58:39N

TABLE 5 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE BAIRD TANNER CRAB WERE TAKEN

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LEGAL		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LEGAL				
A01	06/05	55:01	167:31	Y34896 Z48882	133	4.1	3.	3.	0.	0.	6.	0.0		
A02	05/31	55:00	166:56	Y34823 Z48679	86	3.8	82.	182.	33.	1.	299.	0.4		
A03	05/22	55:00	160:21	X48476 Y34740	76	4.0	145.	105.	51.	24.	325.	7.3		
A04	05/12	55:00	165:45	X18315 Y34656	71	4.3	13.	4.	2.	4.	23.	18.6		
A05	07/09	55:00	165:09	Y34564 Z48056	59	4.6	25.	32.	0.	0.	57.	0.0		
B01	06/05	55:20	167:33	Y34881 Z48931	81	4.5	53.	428.	6.	0.	487.	0.0		
B02	05/31	55:20	156:58	Y34797 Z48735	77	3.8	64.	18.	19.	8.	109.	7.0		
B03	05/22	55:20	166:20	X48516 Y34703	70		28.	40.	16.	2.	86.	2.3		
B04	05/12	55:20	165:46	X18398 Y34617	66		10.	3.	3.	3.	19.	13.5		
B05	06/22	55:21	165:10	X18428 Y48088	58	4.6	55.	22.	3.	0.	79.	0.0		
B06	06/22	55:20	164:35	X18448 Y47867	55	3.6	35.	3.	15.	5.	58.	9.2		
B07	06/22	55:20	164:00	X18465 Y47655	41	4.0	0.	0.	1.	0.	1.	0.0		
B07	07/07	55:20	164:01	Y34336 Z47657	38	5.6	0.	0.	1.	0.	1.	0.0		
B08	05/31	55:20	163:25	X47430 Y34243	28		59.	193.	134.	72.	459.	15.8		
B08	07/07	55:20	163:26	Y34246 Z47434	25	7.0	13.	19.	3.	2.	37.	4.4		
C01	06/01	55:39	167:35	Y34856 Z48995	74	5.0	43.	121.	12.	1.	176.	0.7		
C02	05/31	55:40	165:58	Y34760 Z48785	74	3.7	3.	19.	3.	1.	25.	2.2		
C03	05/22	55:40	166:22	X48563 Y34660	67	3.5	8.	35.	8.	1.	52.	1.8		
C04	05/12	55:40	165:48	X18480 Y34565	65	4.0	4.	1.	4.	1.	9.	5.9		
C05	05/27	55:40	165:10	X48109 Y34460	58	3.3	17.	15.	6.	3.	42.	6.5		
C06	05/27	55:40	164:36	X47894 Y34368	51	3.6	103.	67.	14.	10.	195.	5.1		
C07	05/28	55:41	165:00	X47661 Y34264	50	3.0	25.	22.	0.	0.	47.	0.0		
C08	05/31	55:40	163:24	X47430 Y34171	42	3.2	273.	5.	64.	87.	429.	20.3		
C08	07/07	55:40	163:24	Y34172 Z47432	42	4.0	40.	25.	28.	32.	125.	25.3		
C09	05/31	58:40	162:51	X47214 Y34085	27	3.9	17.	4.	2.	5.	28.	17.9		
C09	07/07	55:40	162:52	Y34090 Z47228	29	7.0	5.	5.	2.	0.	12.	0.0		
C18	06/05	53:40	168:11	X49198 Y34942	72	4.0	108.	304.	4.	0.	416.	0.0		
D01	06/01	55:59	167:36	Y34821 Z49053	73	4.5	56.	171.	4.	0.	231.	0.0		
D02	06/01	56:00	167:00	Y34717 Z48833	75	3.9	5.	18.	6.	0.	28.	0.0		
D03	05/22	56:00	166:24	X48606 Y34611	65		5.	5.	6.	0.	15.	0.0		
D04	05/12	56:00	165:47	X18552 Y34501	59	3.5	2.	2.	4.	1.	9.	6.3		
D05	05/27	56:00	165:11	X48137 Y34397	51	3.6	7.	8.	2.	2.	19.	8.7		
D06	05/16	56:00	164:35	Y34286 Z47891	50	2.2	6.	1.	2.	2.	11.	18.8		
D07	05/28	55:59	163:59	X47670 Y34198	48		55.	5.	18.	5.	82.	5.6		
D08	05/16	56:00	163:24	Y34097 Z47439	48	2.2	7.	2.	1.	0.	9.	0.0		
D09	05/31	56:00	162:49	X47207 Y34001	42	3.0	78.	5.	7.	9.	99.	9.2		
D10	05/18	56:00	162:14	Y33910 Z46976	39	3.2	2.	5.	1.	0.	8.	0.0		
D18	06/05	56:00	158:13	X49270 Y34920	79	3.7	40.	97.	3.	0.	140.	0.0		
E01	06/20	56:20	167:39	Y34775 Z49109	72	3.5	1.	26.	6.	1.	35.	3.8		
E02	06/06	56:20	167:02	Y34657 Z49872	62	3.4	4.	7.	4.	1.	16.	4.0		
E03	05/23	56:19	166:24	X48643 Y34551	55		6.	2.	0.	1.	8.	10.0		
E04	05/13	56:20	165:48	X18617 Y34429	51	2.2	1.	3.	1.	1.	7.	20.0		
E05	05/27	56:20	165:12	X48155 Y34323	46	1.9	0.	0.	1.	1.	2.	50.0		
E06	05/16	56:21	164:35	X18631 Y34195	47	1.4	0.	4.	1.	3.	7.	38.5		
E07	05/28	55:20	164:01	X47682 Y34114	45	1.9	10.	1.	2.	0.	13.	0.0		

NOTE: PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH

TABLE 5 DATA FROM THE 1930 EASTERN BERING SEA TRAWL SURVEY WHERE BAIRD TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LEGAL		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LEGAL				
E08	05/16	56:19	163:23	Y34011 Z47435	48	3.0	9.	12.	1.	1.	23.	2.8		
E09	05/31	56:20	162:49	X47198 Y33911	42	3.0	20.	41.	5.	8.	75.	11.0		
E10	05/18	56:20	162:12	Y33918 Z46958	43	2.4	30.	1.	16.	37.	84.	44.0		
E11	05/29	55:20	161:38	Y33731 Z46733	35	3.1	8.	3.	12.	1.	24.	4.9		
E12	05/29	56:20	161:00	Y33637 Z46480	29	3.0	1.	4.	8.	3.	15.	17.4		
E18	06/06	56:20	168:15	Y49335 Y34986	32	3.7	733.	592.	29.	12.	1367.	0.9		
E19	06/06	56:20	168:50	X49539 Y34982	76	3.6	38.	65.	6.	2.	111.	1.5		
E20	06/21	55:20	169:29	Y14485 Y49744	73	4.0	3.	7.	0.	0.	11.	0.0		
E21	06/21	57:20	170:05	X13398 Y49901	58	4.0	21.	51.	22.	2.	95.	1.8		
E22	06/21	56:19	170:41	X13259 Y50008	64	4.0	1200.	157.	35.	2.	1394.	0.2		
F01	06/20	56:40	167:40	Y34707 Z49139	51	3.4	0.	0.	5.	4.	9.	46.2		
F02	06/26	56:40	167:04	Y34587 Z48903	52	2.7	0.	1.	3.	0.	4.	0.0		
F03	05/23	56:40	165:26	X48652 Y34464	45	2.0	1.	1.	2.	0.	3.	0.0		
F04	05/13	56:40	165:50	X18668 Y34350	43	2.2	1.	0.	0.	1.	1.	50.0		
F05	05/27	55:40	165:14	X48169 Y34326	40	1.8	0.	0.	2.	2.	4.	50.0		
F06	05/15	56:40	164:36	X18672 Y34114	41	1.4	0.	2.	0.	1.	3.	20.0		
F06	07/06	56:40	164:36	Y34123 Z47918	40	2.0	1.	0.	0.	2.	2.	66.7		
F07	05/28	56:40	164:00	X42678 Y34019	40	1.5	1.	2.	6.	2.	11.	18.8		
F08	05/18	56:40	163:23	Y33914 Z47431	41	2.0	6.	4.	1.	1.	12.	5.3		
F09	05/31	56:40	162:47	X47191 Y33616	38	2.5	24.	18.	3.	4.	48.	7.5		
F10	05/18	56:40	162:11	Y33721 Z46947	39	1.3	2.	5.	1.	4.	11.	35.3		
F11	05/20	56:40	161:35	Y33629 Z46708	50	2.9	163.	2.	19.	96.	280.	34.4		
F12	05/28	56:39	160:59	Y33540 Z46466	38	2.8	22.	4.	4.	6.	36.	17.2		
F13	05/26	56:40	160:22	Y33450 Z46218	32	2.7	4.	2.	6.	2.	14.	16.7		
F14	05/28	56:40	159:46	Y33368 Z45976	19	3.6	0.	1.	1.	1.	2.	33.3		
F18	06/20	56:40	168:17	Y34830 Z49379	58	3.5	0.	6.	0.	6.	12.	50.0		
F19	06/06	56:30	169:15	X49709 Y35032	52	3.5	22.	35.	5.	1.	63.	1.4		
F20	06/10	56:31	169:48	X49879 Y35105	46	3.7	482.	645.	118.	45.	1291.	3.5		
F21	06/18	56:31	170:32	X18385 Y35138	51	4.0	27.	145.	12.	1.	185.	0.3		
F21	06/18	56:40	170:08	X18541 Z50007	52	4.5	17.	179.	35.	3.	234.	1.3		
F22	06/18	56:40	170:44	X18399 Y35127	60	4.9	72.	105.	11.	4.	192.	2.1		
F23	06/17	56:40	171:21	X18195 Y35070	63	3.8	251.	113.	13.	2.	384.	0.6		
F24	06/22	56:40	171:58	Y34993 Z50164	71	3.7	201.	458.	0.	0.	659.	0.0		
F25	06/27	56:40	172:34	Y34913 Z50172	77	3.4	44.	35.	0.	0.	79.	0.0		
G02	06/06	57:10	167:05	Y34488 Z48911	40		1.	0.	1.	0.	1.	0.0		
G03	05/23	57:00	166:28	X48668 Y34368	39	2.6	0.	1.	0.	0.	1.	0.0		
G04	05/13	57:00	165:51	X18709 Y34250	41	1.5	0.	0.	0.	1.	1.	100.0		
G05	05/26	57:00	155:13	X48165 Y34131	37	2.0	0.	1.	1.	0.	2.	0.0		
G06	05/15	57:00	164:36	X18707 Y34007	37	1.7	1.	3.	2.	0.	6.	0.0		
G06	07/06	57:00	164:36	Y34014 Z47916	37	2.0	1.	0.	3.	2.	5.	28.6		
G07	05/28	57:00	164:00	X47672 Y33913	36	2.0	5.	5.	10.	0.	20.	0.0		
G08	05/19	57:00	163:22	Y33806 Z47423	36	1.9	1.	1.	0.	0.	2.	0.0		
G09	05/30	57:00	162:47	X47184 Y33703	31	2.0	3.	5.	4.	9.	21.	42.9		
G10	05/20	56:59	162:10	Y33615 Z46936	34	2.1	2.	2.	3.	5.	12.	40.0		
G11	05/20	57:20	163:22	Y33692 Z47412	29	2.4	1.	1.	1.	2.	6.	33.3		

NOTE:PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH

TABLE 5 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE BAIRD TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED			PERCENT LEGAL	
							FEMALES	MALES (SEE NOTE)			
								SMALL	PRERECruit	LEGAL	
G12	05/28	56:59	160:56	Y33432 Z46442	35		0.	1.	3.	7.	11. 64.7
G13	05/28	57:00	160:20	Y33345 Z46200	33	2.2	3.	4.	1.	4.	12. 38.1
G14	05/27	56:59	159:42	Y33261 Z45947	30	2.6	7.	9.	7.	1.	23. 2.9
G15	05/27	56:59	159:07	Y33184 Z45711	16	3.7	0.	0.	1.	0.	1. 0.0
G18	06/20	57:00	168:20	Y34757 Z49416	44	3.1	0.	0.	28.	0.	28. 0.0
G19	06/20	57:00	163:57	Y34890 Z49662	44	3.3	13.	0.	0.	0.	13. 0.0
G20	06/09	56:59	169:33	X49899 Y35025	42	4.5	11.	8.	5.	5.	29. 18.8
G20	06/10	56:50	169:55	X49996 Y35107	39	3.9	93.	63.	42.	7.	205. 3.3
G21	06/15	57:00	170:10	X18686 Z35132	37	4.5	185.	268.	102.	34.	588. 5.8
G21	06/17	56:50	170:28	X18544 Y35136	54	3.9	28.	144.	17.	2.	192. 0.9
G22	06/16	57:00	170:47	X18503 Y35092	50	4.0	5.	55.	14.	0.	74. 0.0
G23	06/17	57:00	171:23	X18278 Y35002	58	5.0	14.	39.	23.	1.	126. 0.7
G23	07/20	57:10	171:30	X18254 Y34929	58	3.8	15.	64.	3.	1.	83. 1.7
G23	07/21	57:10	171:30	X18260 Y34931	58	3.8	25.	74.	8.	3.	111. 2.8
G23	07/22	57:09	171:26	X18283 Y34945	57	3.9	4.	20.	8.	7.	39. 17.2
G23	07/23	57:09	171:26	-----	57	4.0	16.	41.	5.	0.	62. 0.0
G23	07/23	57:09	171:26	X18279 Y34945	57	4.0	14.	52.	3.	0.	69. 0.0
G24	06/22	57:00	172:02	Y34903 Z50181	68	3.6	394.	171.	21.	0.	586. 0.0
G25	06/27	56:59	172:39	Y34215 Z50179	64	3.4	5.	23.	1.	0.	29. 0.0
G26	06/28	56:50	173:15	X17548 Y34730	75	3.6	315.	949.	3.	0.	1267. 0.0
H01	06/18	57:20	167:44	Y34505 Z49156	40	3.0	0.	0.	1.	1.	1. 50.0
H02	06/06	57:20	167:07	Y34375 Z48911	38	3.6	0.	1.	1.	1.	4. 20.0
H03	05/23	57:20	166:28	X48654 Y34248	37		0.	0.	2.	2.	4. 50.0
H04	05/14	57:20	165:52	X13736 Y34134	38	0.4	0.	1.	1.	1.	3. 40.0
H05	05/26	57:20	165:14	X48159 Y34016	35	1.0	0.	9.	10.	0.	19. 0.0
H06	05/15	57:19	164:37	X18732 Y33894	36	2.3	0.	1.	2.	0.	2. 0.0
H06	07/06	57:20	164:36	Y33906 Z47918	34	2.3	0.	1.	2.	1.	3. 25.0
H07	05/29	57:19	164:00	X47665 Y33799	33	1.5	0.	3.	2.	1.	6. 10.0
H08	05/19	57:00	161:34	Y33521 Z46693	37	1.4	0.	0.	0.	1.	1. 100.0
H09	05/30	57:20	162:46	X47170 Y33594	25	2.0	1.	10.	8.	1.	20. 3.6
H10	05/20	57:20	162:09	Y33497 Z46920	28	1.4	4.	5.	5.	4.	20. 17.6
H11	05/20	57:20	161:32	Y33404 Z46672	30	1.6	1.	0.	4.	4.	9. 42.9
H12	05/26	57:20	160:55	Y33319 Z46430	35	1.4	2.	3.	2.	10.	17. 57.7
H13	05/26	57:20	160:17	Y33230 Z46175	32	2.2	1.	0.	5.	4.	11. 37.5
H14	05/26	57:20	159:39	Y33146 Z45920	30	2.3	1.	4.	3.	2.	11. 21.1
H15	05/27	57:20	159:03	Y33096 Z45678	26	2.7	0.	1.	1.	0.	2. 0.0
H18	06/13	57:20	168:22	Y34638 Z49409	40	3.4	5.	9.	2.	1.	17. 3.7
H19	06/08	57:10	169:19	X49803 Y34915	33	3.1	1.	9.	5.	1.	16. 5.6
H19	06/12	57:20	169:59	Y34765 Z49646	39	3.4	1.	1.	2.	1.	5. 14.3
H20	06/08	57:20	169:36	X49896 Y34905	33	2.9	18.	0.	0.	0.	18. 0.0
H20	06/10	57:10	169:54	X50037 Y35049	25	3.8	92.	173.	10.	10.	285. 3.5
H21	06/13	57:20	170:12	X18714 Y35003	29	5.1	10.	25.	3.	0.	37. 0.0
H22	06/15	57:20	170:50	X18524 Y34961	44	3.7	3.	2.	5.	0.	10. 0.0
H22	06/16	57:10	171:11	X18388 Y34980	53	3.6	3.	2.	7.	5.	17. 27.3
H23	06/16	57:20	171:29	X18278 Y34664	54		22.	1.	2.	2.	26. 6.5

NOTE: PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH

TABLE 5 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE BAIRD TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED					PERCENT LEGAL	
							MALES (SEE NOTE)						
							FEMALES	SMALL	PRERECruit	LEGAL	TOTAL		
H23	07/20	57:10	171:24	X18298	Y34942	56	4.2	0.	29.	2.	33.	6.7	
H23	07/20	57:16	171:24	X18306	Y34904	55	4.2	13.	6.	1.	24.	18.4	
H23	07/21	57:11	171:26	X18286	Y34935	57	3.8	6.	22.	3.	35.	11.3	
H23	07/22	57:10	171:26	X18269	Y34934	57	3.8	17.	49.	9.	78.	4.5	
H23	07/22	57:10	171:27	X18277	Y34937	57	3.8	14.	41.	8.	7.	10.4	
H23	07/23	57:10	171:26	X18287	Y34940	57	4.0	9.	38.	3.	1.	2.4	
H23	07/24	57:10	171:28	X18272	Y34934	57	3.8	6.	23.	11.	5.	10.6	
H23	07/24	57:10	171:27	X18278	Y34938	57	3.8	6.	21.	17.	12.	21.4	
H23	07/24	57:10	171:29	X18264	Y34933	57	3.8	8.	13.	10.	4.	10.9	
H24	06/22	57:20	172:06	Y34773	Z50158	59	3.4	18.	47.	7.	3.	3.6	
H24	07/21	57:11	171:54	X18105	Y34862	60	3.8	39.	64.	11.	4.	118.	
H25	06/27	57:20	172:43	Y34688	Z50159	63	3.3	9.	93.	5.	0.	107.	
H26	06/28	56:20	173:20	Y17569	Y34600	64	3.6	510.	395.	58.	4.	957.	
I02	06/07	57:40	167:08	Y34234	748683	37	1.4	1.	4.	1.	0.	0.4	
I03	05/24	57:39	166:30	X48634	Y34115	35	0.5	0.	2.	1.	0.	0.0	
I04	05/14	57:40	165:53	X18749	Y3398	35	2.3	0.	1.	2.	0.	0.0	
I05	05/26	57:39	165:15	X48142	Y33885	33		0.	3.	2.	1.	12.5	
I06	05/15	57:39	164:37	Y33772	Z47892	29	0.8	0.	4.	0.	1.	22.2	
I06	07/06	57:40	164:38	Y33774	Z47997	22	3.5	0.	2.	1.	0.	0.0	
I07	05/29	57:39	163:59	X47644	Y33669	27	1.3	2.	5.	7.	1.	14.	
I08	05/19	57:40	163:21	Y33562	Z47592	26	1.1	0.	2.	0.	1.	25.0	
I09	05/30	57:40	162:45	X47147	Y33461	23	2.1	3.	6.	5.	2.	11.8	
I10	05/20	57:40	162:08	Y33372	Z46902	26	1.7	0.	1.	3.	0.	0.0	
I11	05/20	57:40	161:29	Y33279	Z46649	29		0.	1.	4.	0.	0.0	
I12	05/26	57:40	160:52	Y33193	Z46402	31	1.7	1.	0.	2.	1.	33.3	
I13	05/26	57:40	160:16	Y33111	Z46159	30	2.0	3.	1.	3.	1.	9.1	
I14	05/25	57:40	159:37	Y33029	Z45907	26	3.0	1.	0.	1.	0.	0.0	
I18	06/13	57:40	168:24	Y34482	Z49371	38	3.3	0.	0.	2.	0.	0.0	
I20	06/11	57:49	169:40	X18698	Y00705	37		1.	0.	2.	0.	0.0	
I20	06/11	57:29	169:59	X18704	Y34870	36	2.0	1.	1.	0.	0.	0.0	
I21	06/11	57:40	170:16	X18616	Y34755	38	2.1	0.	1.	1.	0.	0.0	
I21	06/13	57:30	170:38	X18585	Y34880	41	3.6	2.	0.	2.	0.	0.0	
I22	06/13	57:40	170:54	X18457	Y34744	45	3.0	1.	0.	0.	0.	0.0	
I22	06/14	57:29	171:11	X18382	Y34825	50	3.4	2.	2.	0.	0.	0.0	
I23	06/14	57:39	171:32	X18253	Y34691	53	3.1	6.	9.	4.	1.	4.5	
I24	06/22	57:40	172:10	Y34609	Z50104	59	3.2	6.	18.	6.	1.	31.2	
I25	06/27	57:40	172:48	Y34529	Z50113	65	3.2	172.	255.	17.	0.	443.	
I26	06/26	57:40	173:24	X17573	Y34450	73	3.6	1080.	280.	7.	0.	1367.	
J03	05/24	57:59	166:30	X48598	Y33960	32	0.1	0.	4.	1.	0.	0.0	
J04	05/14	58:00	165:54	X18748	Y33848	30	0.3	0.	3.	1.	0.	0.0	
J05	05/26	58:05	165:14	X48105	Y33730	26		0.	0.	2.	0.	0.0	
J07	05/29	58:00	164:00	X47629	Y33527	24	0.5	1.	8.	2.	0.	11.0	
J08	05/19	53:00	163:21	Y33422	Z47571	23	1.6	6.	1.	1.	0.	0.0	
J12	05/22	58:00	160:50	Y33062	Z46384	24	1.9	0.	1.	0.	1.	33.3	
J13	05/22	58:00	161:12	Y32989	Z46136	27	1.9	0.	0.	1.	0.	0.0	

NOTE: PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH

TABLE 5 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE BAIRDI TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LEGAL		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LEGAL				
J20	06/11	57:50	169:57	X1362A Y00618	38		0.	1.	0.	0.	1.	0.0		
J20	06/13	58:00	169:42	Y34476 Z49701	38	2.7	0.	1.	0.	0.	1.	0.0		
J22	06/13	57:50	171:16	X18321 Y34606	49	3.0	0.	0.	1.	0.	1.	0.0		
J23	06/14	58:00	171:36	Y34473 Z49994	53	2.7	1.	0.	0.	0.	1.	0.0		
J24	06/23	58:00	172:14	Y34417 750027	57	2.9	13.	10.	0.	0.	23.	0.0		
J25	06/26	58:00	172:52	Y34352 Z50047	60	2.9	76.	101.	0.	0.	177.	0.0		
J26	06/29	58:00	173:24	X17562 Y34285	61		292.	442.	4.	0.	738.	0.0		
K01	06/07	58:20	167:50	Y33995 Z49012	33		0.	1.	0.	0.	1.	0.0		
K07	05/29	58:20	164:00	X47548 Y33372	21	3.2	1.	0.	0.	0.	1.	0.0		
K23	06/14	58:20	171:39	Y34254 Z49390	52	1.8	0.	1.	1.	0.	1.	0.0		
K24	06/23	58:20	172:18	Y34210 Z49937	56	2.6	3.	9.	0.	0.	12.	0.0		
K25	06/26	53:21	172:56	Y34158 Z49969	60	2.3	31.	33.	0.	0.	64.	0.0		
K26	06/29	59:20	173:34	X17530 Y34099	60	3.0	258.	835.	0.	0.	1094.	0.0		
K27	07/03	53:20	174:14	X17308 Y34076	76	3.5	181.	335.	0.	0.	516.	0.0		
L23	06/23	58:40	171:43	Y34024 Z49783	50	1.2	0.	1.	0.	0.	1.	0.0		
L24	06/23	58:40	172:22	Y34994 Z49841	56	1.4	0.	1.	0.	0.	1.	0.0		
L25	06/26	58:40	173:00	Y33954 Z49883	52	1.8	6.	19.	0.	0.	25.	0.0		
L26	06/26	58:40	173:38	Y33908 Z49913	59	1.3	27.	56.	1.	0.	84.	0.0		
L27	06/29	58:40	174:16	X17301 Y33856	83	2.9	1221.	440.	5.	0.	1666.	0.0		
M03	07/04	59:00	166:36	X18658 Y33396	18	5.0	13.	18.	0.	0.	31.	0.0		
M23	06/23	59:00	171:47	Y33792 Z49678	47	0.8	0.	3.	0.	0.	3.	0.0		
M24	06/25	59:00	172:26	Y33773 Z49744	54	0.4	0.	1.	1.	0.	1.	0.0		
M25	06/25	59:00	173:05	Y33745 Z49794	59	1.6	1.	3.	1.	0.	5.	0.0		
M26	06/26	59:00	173:43	Y33709 Z49832	65	2.6	3.	4.	0.	0.	7.	0.0		
M27	06/30	59:00	174:22	X17269 Y33667	68	2.4	32.	19.	1.	0.	52.	0.0		
M28	07/01	59:10	175:03	X17062 Y33618	69	3.1	15.	55.	2.	0.	83.	0.0		
M29	07/01	59:00	175:43	X16850 Y33572	71	2.6	3.	8.	1.	0.	12.	0.0		
M30	07/02	59:00	176:18	X16668 Y33532	72	1.9	0.	1.	0.	0.	1.	0.0		
M32	07/02	59:00	177:36	X16262 Y33439	71	3.0	415.	206.	6.	0.	627.	0.0		
N27	06/30	59:19	174:27	X17239 Y33474	54	2.0	2.	3.	0.	0.	5.	0.0		
N28	06/30	59:20	175:06	X17049 Y33430	70	2.4	0.	2.	1.	1.	4.	25.0		
N29	07/01	59:00	175:45	X16854 Y33401	72	1.5	2.	2.	0.	0.	3.	0.0		
O27	06/30	59:39	174:27	X17230 Y33278	61		0.	1.	0.	0.	1.	0.0		
O29	07/01	59:40	175:52	X16831 Y33210	73	1.6	0.	1.	1.	0.	2.	0.0		
P32	07/11	50:00	177:55	Y32953 Z49765	78	1.4	7.	1.	1.	0.	9.	0.0		
S53	07/11	60:05	179:43	Y32879 Z49768	81	2.4	25.	8.	1.	0.	35.	0.0		
R32	07/10	60:40	173:10	Y32619 Z49636	99	2.0	0.	1.	0.	0.	1.	0.0		
Z05	07/09	:	1 :	-----	0	6.0	7.	5.	0.	0.	12.	0.0		

NOTE: PRE-RECRUIT = 4.3-5.4 IN. WIDTH; LEGAL = GREATER THAN 5.4 IN. WIDTH

TABLE 6 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYBRID TANNER CRAB WERE TAKEN

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LARGE		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LARGE				
A02	05/31	55:00	166:56	Y34823	Z48679	86	3.8	0.	0.	1.	3.	3.	83.3	
A03	05/22	55:00	160:21	X48476	Y34740	76	4.0	6.	0.	2.	3.	11.	25.0	
A05	07/09	55:00	165:09	Y34564	Z48056	59	4.6	0.	0.	1.	0.	1.	0.0	
B02	05/31	55:20	166:58	Y34797	Z48735	77	3.9	1.	1.	1.	5.	7.	66.7	
B03	05/22	55:20	166:20	X48516	Y34703	70		2.	1.	1.	5.	9.	55.6	
B04	05/12	55:20	165:46	X13399	Y34617	66		0.	1.	2.	4.	6.	58.3	
B05	06/22	55:21	165:10	X18428	Y48088	58	4.6	0.	1.	1.	11.	13.	85.7	
B06	06/22	55:20	164:35	X13443	Y47567	55	3.6	0.	2.	2.	8.	13.	64.7	
B08	05/31	55:20	163:25	X47430	Y34243	78		0.	2.	0.	0.	2.	0.0	
C01	05/01	55:39	167:35	Y34856	Z48995	74	5.0	0.	1.	0.	0.	1.	0.0	
C03	05/22	55:40	166:22	X48563	Y34660	67	3.5	1.	3.	3.	14.	20.	68.2	
C04	05/12	55:40	165:48	X18480	Y34565	65	4.0	0.	0.	0.	2.	2.	100.0	
C05	05/27	55:40	165:10	X48109	Z34460	58	3.3	0.	0.	0.	9.	9.	100.0	
C06	05/27	55:40	164:36	X47894	Y34368	51	3.6	1.	14.	7.	15.	37.	40.0	
C07	05/28	55:41	165:00	X47661	Y34264	50	3.0	0.	2.	0.	6.	8.	70.0	
C08	05/31	55:40	163:24	X47430	Y34171	42	3.2	0.	0.	1.	0.	1.	0.0	
C08	07/07	55:40	163:24	Y34172	Z47432	42	4.0	0.	0.	2.	4.	6.	71.4	
C09	05/31	58:40	162:51	X47214	Y34085	27	3.9	0.	2.	0.	1.	3.	33.3	
C09	07/07	55:40	162:52	Y34090	Z47228	29	7.0	0.	0.	1.	0.	1.	0.0	
C18	06/05	53:40	168:11	X49193	Y34942	72	4.0	0.	0.	1.	0.	1.	0.0	
D01	06/01	55:54	167:36	Y34821	Z49053	73	4.5	0.	1.	0.	0.	1.	0.0	
D02	06/01	56:00	167:00	Y34717	Z48d33	75	3.9	0.	0.	0.	1.	1.	100.0	
D03	05/22	56:00	166:24	X48606	Y34611	65		1.	3.	3.	6.	13.	50.0	
D04	05/12	56:00	165:47	X18552	Y34501	59	3.5	1.	3.	12.	7.	28.	25.5	
D05	05/27	56:00	165:11	X48137	Y34397	51	3.6	0.	5.	7.	7.	19.	34.8	
D06	05/16	56:00	164:35	Y34286	Z47891	50	2.2	1.	6.	5.	7.	19.	38.5	
D07	05/28	55:59	163:59	X47670	Y34198	48		1.	9.	1.	9.	20.	45.5	
D08	05/16	56:00	163:24	Y34097	Z47439	48	2.2	0.	2.	2.	0.	3.	0.0	
D09	05/31	56:00	162:49	X47207	Y34001	42	3.0	0.	1.	5.	3.	8.	33.3	
D10	05/18	56:00	162:14	Y33910	Z46976	39	3.2	0.	1.	1.	0.	1.	0.0	
E01	06/20	56:20	167:39	Y34775	Z49109	72	3.5	43.	0.	1.	1.	44.	1.5	
E02	06/06	56:20	167:02	Y34657	Z48672	62	3.4	0.	0.	0.	5.	5.	100.0	
E03	05/23	56:19	166:24	X48643	Y34551	55		14.	2.	7.	42.	64.	64.9	
E04	05/13	56:20	165:48	X18617	Y34429	51	2.2	0.	1.	1.	7.	9.	78.6	
E05	05/27	56:20	165:12	X48155	Y34323	46	1.9	1.	7.	6.	13.	27.	48.5	
E06	05/16	56:21	164:35	X18631	Y34195	47	1.4	1.	2.	7.	20.	30.	66.7	
E07	05/28	55:20	164:01	X47682	Y34114	45	1.9	1.	4.	1.	13.	18.	70.0	
E08	05/16	56:19	163:23	Y34011	Z47435	48	3.0	0.	2.	1.	6.	9.	64.3	
E09	05/31	56:20	162:49	X47193	Y33911	42	3.0	0.	2.	1.	5.	8.	66.7	
E10	05/18	56:20	162:12	Y33818	Z46958	43	2.4	0.	1.	0.	4.	5.	75.0	
E18	06/06	56:20	168:15	X49335	Y34386	82	3.7	1025.	11.	2.	3.	1041.	0.3	
E19	06/06	56:20	168:50	X49539	Y34982	76	3.6	21.	29.	7.	25.	82.	30.6	
E21	06/21	57:20	170:05	X13398	Y49901	58	4.0	0.	0.	1.	0.	1.	0.0	
E22	06/21	56:19	170:41	X18259	Y50008	64	4.0	0.	1.	0.	0.	1.	0.0	
F01	06/20	56:40	167:40	Y34707	Z49139	51	3.4	429.	4.	0.	17.	451.	3.8	

NOTE:PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH

TABLE 6 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYBRID TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LARGE		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LARGE				
F02	06/06	56:40	167:04	Y34587	Z48903	52	2.7	1.	1.	4.	9.	14.	60.9	
F03	05/23	56:40	166:26	X48652	Y34464	45	2.0	5.	7.	7.	15.	35.	42.9	
F04	05/13	56:40	165:50	X18668	Y34350	43	2.2	2.	2.	1.	5.	9.	50.0	
F05	05/27	56:40	165:14	X48169	Y34326	40	1.8	4.	6.	3.	15.	27.	53.3	
F06	05/15	56:40	164:36	X18672	Y34114	41	1.4	0.	1.	1.	3.	5.	55.6	
F06	07/06	56:40	164:36	X34123	Z47918	40	2.0	0.	1.	1.	3.	5.	66.7	
F07	05/28	56:40	164:00	X48678	Y34018	40	1.5	0.	6.	8.	19.	32.	57.8	
F08	05/18	56:40	163:23	Y33914	Z47431	41	2.0	0.	1.	1.	4.	6.	60.0	
F09	05/31	56:40	162:47	X47191	Y33816	38	2.5	0.	3.	1.	3.	7.	40.0	
F10	05/18	56:40	162:11	Y33721	Z46947	39	1.3	0.	0.	0.	1.	1.	100.0	
F11	05/20	56:40	161:35	Y33629	Z46708	50	2.9	0.	0.	0.	4.	4.	100.0	
F18	06/20	56:40	168:17	Y34830	Z49379	58	3.5	318.	23.	0.	53.	395.	13.5	
F19	06/06	56:30	169:15	X49709	Y35032	52	3.5	3.	4.	1.	0.	7.	0.0	
F19	06/20	56:40	168:54	Y34951	Z49613	56	3.5	1255.	135.	53.	39.	1532.	2.6	
F20	06/10	56:31	169:48	X49879	Y35105	46	3.7	308.	24.	5.	5.	.341.	1.3	
F21	06/18	56:40	170:08	X18541	Z50007	52	4.3	0.	19.	14.	7.	40.	17.5	
F21	06/18	56:31	170:32	X18385	Y35138	61	4.0	0.	2.	1.	0.	2.	0.0	
F22	06/18	56:40	170:44	X18399	Y35127	60	4.9	0.	0.	0.	5.	5.	100.0	
F23	06/17	56:40	171:21	X18195	Y35070	63	3.8	42.	12.	3.	4.	62.	6.3	
G01	06/19	57:00	167:42	Y34622	Z49162	42	2.7	309.	126.	46.	34.	514.	6.7	
G02	06/06	57:00	167:05	Y34488	Z48911	40		1.	13.	13.	22.	49.	44.6	
G03	05/23	57:00	166:28	X48668	Y34368	39	2.6	2.	6.	6.	11.	25.	44.0	
G04	05/13	57:00	165:51	X18709	Y34250	41	1.5	0.	1.	1.	1.	2.	33.3	
G05	05/26	57:00	165:13	X48165	Y34131	37	2.0	1.	8.	5.	4.	18.	21.7	
G06	05/15	57:00	164:36	X18707	Y34007	37	1.7	1.	4.	3.	1.	8.	8.3	
G06	07/06	57:00	164:36	Y34014	Z47916	37	2.0	0.	2.	1.	3.	6.	50.0	
G07	05/28	57:00	164:00	X47672	Y33913	36	2.0	0.	7.	7.	5.	19.	26.3	
G08	05/19	57:00	163:22	Y33806	Z47423	36	1.9	0.	4.	1.	1.	5.	12.5	
G09	05/30	57:00	162:47	X47184	Y33708	31	2.0	0.	1.	1.	0.	2.	0.0	
G18	06/20	57:00	168:20	Y34757	Z49416	44	3.1	1658.	525.	83.	55.	2321.	2.4	
G19	06/08	56:49	169:18	X49787	Y35004	42	3.0	2018.	264.	9.	9.	2300.	0.4	
G19	06/20	57:00	168:57	Y34890	Z49662	44	3.3	669.	259.	13.	27.	969.	2.8	
G20	06/09	56:59	169:33	X49899	Y35025	42	4.5	15.	273.	131.	16.	435.	3.8	
G20	06/10	56:50	169:55	X49996	Y35107	39	3.9	668.	31.	2.	3.	704.	0.5	
G21	06/15	57:00	170:10	X18686	Y35132	37	4.5	583.	80.	22.	3.	688.	0.4	
G21	06/17	56:50	170:28	X18544	Y35136	54	3.9	2.	11.	7.	3.	22.	14.8	
G22	06/16	57:00	170:47	X18508	Y35092	50	4.0	8.	25.	19.	25.	77.	31.9	
G23	06/17	57:00	171:23	X18278	Y35002	58	5.0	576.	31.	23.	24.	654.	3.6	
G23	07/20	57:10	171:30	X18254	Y34929	58	3.8	832.	41.	17.	26.	916.	2.9	
G23	07/21	57:10	171:30	X18260	Y34931	58	3.8	503.	38.	19.	28.	587.	4.8	
G23	07/22	57:09	171:26	X18283	Y34945	57	3.8	235.	40.	21.	30.	326.	9.2	
G23	07/23	57:09	171:26	-----	-----	57	4.0	1785.	30.	12.	11.	1838.	0.6	
G23	07/23	57:09	171:26	X18279	Y34945	57	4.0	1869.	109.	43.	47.	2058.	2.3	
G24	06/22	57:00	172:02	Y34903	Z50181	68	3.6	32.	0.	0.	0.	32.	0.0	
G25	06/27	56:59	172:39	Y34815	Z50179	64	3.4	0.	3.	0.	0.	3.	0.0	

NOTE:PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH

TABLE 6 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYBRID TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED				TOTAL	PERCENT LARGE		
							MALES (SEE NOTE)							
							FEMALES	SMALL	PRERECruit	LARGE				
H01	06/18	57:20	167:44	Y34505	Z49156	40	3.0	0.	16.	3.	0.	19.	0.0	
H02	06/06	57:20	167:07	Y34375	Z48911	39	3.6	1.	25.	5.	5.	36.	14.0	
H03	05/23	57:20	166:28	X48654	Y34248	37		0.	19.	7.	12.	38.	31.0	
H04	05/14	57:20	165:52	X18736	Y34134	38	0.4	3.	25.	9.	9.	46.	20.3	
H05	05/26	57:20	165:14	X48159	Y34016	35	1.0	2.	109.	57.	12.	181.	6.9	
H06	05/15	57:19	164:37	X18732	Y33694	36	2.3	2.	16.	5.	2.	25.	8.2	
H06	07/06	57:20	164:38	Y33905	Z47918	34	2.3	6.	16.	0.	3.	25.	13.3	
H07	05/29	57:19	164:00	X47665	Y33799	33	1.5	2.	10.	1.	1.	14.	8.7	
H08	05/19	57:00	161:34	Y33521	Z46693	37	1.4	1.	1.	0.	0.	3.	0.0	
H09	05/30	57:20	162:46	X47170	Y33594	25	2.0	1.	1.	0.	0.	2.	0.0	
H10	05/20	57:20	162:09	Y33497	Z46920	28	1.4	0.	2.	2.	0.	4.	0.0	
H11	05/20	57:20	161:32	Y33404	Z46672	30	1.6	0.	1.	1.	0.	1.	0.0	
H18	06/13	57:20	163:22	Y34638	Z49409	40	3.4	2.	258.	2.	0.	261.	0.0	
H19	06/08	57:10	169:19	X49803	Y34915	33	3.1	145.	126.	6.	5.	283.	1.6	
H19	06/12	57:20	168:59	Y34765	Z49646	39	3.4	1.	39.	3.	3.	47.	7.0	
H20	06/08	57:20	169:36	X49896	Y34905	33	2.9	3564.	327.	9.	0.	3900.	0.0	
H20	06/10	57:10	169:54	X50037	Y35049	25	3.8	12.	40.	22.	12.	85.	13.7	
H21	06/13	57:20	170:12	X18714	Y35003	29	5.1	10.	12.	1.	0.	23.	0.0	
H22	06/16	57:20	170:50	X18524	Y34961	44	3.7	17475.	925.	135.	55.	18590.	0.3	
H22	06/16	57:10	171:11	X18388	Y34980	53	3.6	88.	51.	37.	35.	212.	16.7	
H23	06/16	57:20	171:29	X18278	Y34864	54		2512.	72.	12.	10.	2606.	0.4	
H23	07/20	57:10	171:24	X18298	Y34942	56	4.2	389.	28.	14.	14.	645.	2.2	
H23	07/20	57:16	171:24	X18306	Y34904	55	4.2	2933.	50.	11.	12.	3006.	0.4	
H23	07/21	57:11	171:26	Y18286	Y34935	57	3.8	267.	37.	23.	20.	347.	5.8	
H23	07/22	57:10	171:28	X18269	Y34934	57	3.8	1325.	42.	31.	49.	1447.	3.4	
H23	07/22	57:10	171:27	X18277	Y34937	57	3.8	946.	55.	24.	61.	1086.	5.6	
H23	07/23	57:10	171:26	X18287	Y34940	57	4.0	734.	109.	62.	43.	948.	4.5	
H23	07/24	57:10	171:28	X18272	Y34934	57	3.8	252.	68.	68.	94.	482.	19.5	
H23	07/24	57:10	171:27	X18279	Y34938	57	3.8	202.	119.	56.	72.	449.	16.0	
H23	07/24	57:10	171:29	X18264	Y34933	57	3.8	323.	25.	22.	33.	401.	8.3	
H24	06/22	57:20	172:06	Y34773	Z50158	59	3.4	4.	19.	7.	15.	45.	33.8	
H24	07/21	57:11	171:54	X18105	Y34362	60	3.8	592.	15.	3.	8.	619.	1.3	
H25	06/27	57:20	172:43	Y34688	Z50159	63	3.3	5.	9.	1.	0.	14.	0.0	
H26	06/28	56:20	173:20	X17569	Y34600	64	3.6	0.	3.	2.	2.	7.	28.6	
I01	06/18	57:40	167:46	Y34359	Z49128	38	2.9	0.	3.	1.	0.	4.	0.0	
I02	06/07	57:40	167:08	Y34234	Z43883	37	1.4	4.	32.	2.	2.	40.	5.4	
I03	05/24	57:39	166:30	X48634	Y34115	35	0.5	17.	57.	21.	3.	99.	3.4	
I04	05/14	57:40	165:53	X18749	Y33998	35	2.3	3.	50.	27.	8.	88.	9.2	
I05	05/26	57:39	165:15	X48142	Y33685	33		10.	67.	12.	12.	102.	12.3	
I06	05/15	57:39	164:37	Y33772	Z47d92	29	0.8	2.	21.	6.	1.	29.	1.9	
I06	07/06	57:40	164:38	Y33774	Z47997	22	3.5	7.	31.	7.	27.	72.	37.9	
I07	05/29	57:39	163:59	X47644	Y33569	27	1.3	87.	126.	2.	13.	227.	5.9	
I08	05/19	57:40	163:21	Y33562	Z47392	26	1.1	9.	40.	0.	1.	50.	2.5	
I09	05/30	57:40	162:45	X47147	Y33461	23	2.1	0.	3.	0.	0.	3.	0.0	
I18	06/13	57:40	163:24	Y34482	Z49371	33	3.3	1.	15.	0.	0.	16.	0.0	

NOTE:PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH

TABLE 6 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYBRID TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LARGE		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LARGE				
I19	06/13	57:40	168:02	Y34603 Z49602	37	3.3	1.	7.	0.	0.	8.	0.0		
I20	06/11	57:49	169:40	X18698 Y00705	37		9.	52.	0.	0.	61.	0.0		
I20	06/11	57:29	169:59	X18704 Y34870	36	2.0	643.	170.	6.	0.	819.	0.0		
I21	06/11	57:40	170:16	X18616 Y34755	33	2.1	3.	72.	0.	0.	76.	0.0		
I21	06/13	57:30	170:38	X18585 Y34380	41	3.6	3871.	614.	14.	18.	4516.	0.4		
I22	06/13	57:40	170:54	X18457 Y34744	45	3.0	2062.	148.	5.	3.	2218.	0.2		
I22	06/14	57:29	171:11	X13388 Y34825	50	3.4	13907.	358.	33.	8.	19307.	0.0		
I23	06/14	57:39	171:32	X13253 Y34691	53	3.1	19.	42.	7.	7.	75.	9.6		
I24	06/22	57:40	172:10	Y34609 Z50104	59	3.2	77.	11.	5.	3.	95.	2.8		
I25	06/27	57:40	172:48	Y34529 Z50113	65	3.2	0.	17.	0.	5.	22.	24.2		
I26	06/28	57:40	173:24	X17573 Y34450	78	3.6	0.	1.	0.	0.	1.	0.0		
J01	06/18	58:00	167:48	Y34190 Z49030	37	1.6	0.	13.	1.	1.	19.	3.4		
J02	06/07	58:00	167:10	Y34072 Z48842	34	1.5	1.	31.	3.	0.	35.	0.0		
J03	05/24	57:59	166:30	X48598 Y33960	32	0.1	70.	316.	32.	5.	424.	1.3		
J04	05/14	53:00	165:54	X18748 Y33848	30	0.3	9.	138.	24.	3.	174.	1.7		
J05	05/26	58:05	165:14	X48105 Y33730	26		64.	74.	10.	17.	165.	10.1		
J06	05/15	57:59	164:37	X18751 Y33617	25	1.1	56.	78.	1.	0.	134.	0.0		
J07	05/29	58:00	164:00	X47629 Y33527	24	0.5	22.	75.	6.	13.	115.	11.0		
J08	05/19	58:00	163:21	Y33422 Z47371	23	1.6	0.	2.	1.	0.	-	0.0		
J11	05/20	58:00	161:29	Y33149 Z46634	30		0.	1.	0.	0.	1.	0.0		
J18	06/18	58:00	168:26	Y34298 Z49304	38	3.0	0.	15.	0.	0.	15.	0.0		
J19	06/13	53:03	169:04	Y34398 Z49519	37	3.2	0.	6.	0.	0.	6.	0.0		
J20	05/11	57:50	169:57	X18628 Y00618	38		3.	21.	0.	0.	24.	0.0		
J20	06/13	58:00	169:42	Y34476 Z49701	38	2.7	29.	12.	0.	0.	41.	0.0		
J21	06/14	58:00	170:20	Y34514 Z49843	41	1.7	4.	3.	0.	0.	8.	0.0		
J22	06/13	57:50	171:16	X13321 Y34606	49	3.0	5296.	218.	8.	4.	5526.	0.1		
J22	06/14	58:00	170:58	Y34512 Z49938	47	2.2	975.	139.	0.	0.	1114.	0.0		
J23	06/14	58:00	171:36	Y34473 Z49994	53	2.7	12.	2.	0.	1.	15.	8.3		
J24	06/23	58:00	172:14	Y34417 Z50027	57	2.9	5.	0.	0.	0.	5.	0.0		
J25	06/26	53:00	172:52	Y34352 Z50047	60	2.9	6.	7.	2.	0.	15.	0.0		
J26	06/29	58:00	173:24	X17562 Y34285	61		48.	2.	0.	2.	51.	3.0		
K01	05/07	58:20	167:50	Y33995 Z49012	33		1.	37.	5.	0.	93.	0.0		
K02	06/07	58:20	167:11	Y33889 Z48794	28	1.5	636.	721.	0.	0.	1357.	0.0		
K03	05/24	55:20	166:33	X48553 Y33785	25	1.0	163.	1118.	52.	13.	1346.	1.0		
K04	05/14	53:20	165:55	X18735 Y33680	23	0.4	206.	321.	1.	0.	529.	0.0		
K05	05/25	58:19	165:16	X48087 Y33576	23		380.	1305.	22.	10.	1716.	0.6		
K06	05/15	58:20	164:37	X18745 Y33461	24	1.0	405.	702.	4.	0.	1110.	0.0		
K07	05/29	58:20	164:00	X47548 Y33372	21	3.2	0.	0.	1.	0.	1.	0.0		
K08	05/19	58:20	163:22	Y33279 Z47356	20	1.9	0.	1.	0.	0.	1.	0.0		
K18	05/18	58:20	158:28	Y34092 Z49224	36	1.2	1.	58.	1.	1.	71.	1.8		
K19	05/15	59:20	169:07	Y34176 Z49421	37	1.8	19.	151.	0.	0.	180.	0.0		
K20	06/15	58:20	169:44	Y34233 Z49585	38	2.8	17.	6.	0.	0.	23.	0.0		
K22	06/15	59:20	171:01	Y34277 Z49322	45	1.3	18.	48.	0.	0.	66.	0.0		
K23	06/14	53:20	171:39	Y34254 Z49690	52	1.8	1.	2.	0.	0.	3.	0.0		
K24	06/23	58:20	172:18	Y34210 Z49937	55	2.6	0.	2.	0.	0.	2.	0.0		

NOTE: PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH

TABLE 6 DATA FROM THE 1960 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYERID TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LORAN C	DEPTH FTMS	BOTTOM TEMP	NUMBER PER MILE TOWED				PERCENT TOTAL LARGE		
							MALES (SEE NOTE)						
							FEMALES	SMALL PRE-RECRUIT	LARGE				
K25	06/25	58:20	172:58	Y34153	Z49969	60.	2.3	1.	4.	0.	5.	0.0	
K26	06/29	58:20	173:34	X17530	Y24099	60	3.0	0.	46.	0.	46.	0.0	
K27	07/23	58:20	174:14	X17308	Y34036	76	3.5	15.	3.	0.	0.	18.	0.0
L01	06/07	58:40	167:52	Y33778	Z48937	25		895.	1095.	46.	0.	2026.	0.0
L02	07/14	58:40	167:10	Y33688	Z49707	23	4.8	0.	5.	1.	0.	6.	0.0
L03	07/14	58:40	166:30	Y33588	Z48480	22	5.2	0.	2.	0.	0.	2.	0.0
L05	07/15	58:40	165:11	Y33386	Z48006	20	6.2	0.	1.	0.	0.	1.	0.0
L18	06/17	58:40	168:30	Y33874	Z49135	29		259.	1631.	95.	0.	2635.	0.0
L19	06/16	58:40	169:09	Y33944	Z49317	34	1.1	245.	1374.	0.	0.	1619.	0.0
L20	06/16	58:40	169:47	Y33997	Z49472	37	1.0	1257.	260.	27.	0.	1545.	0.0
L21	06/16	58:40	170:26	Y34029	Z49605	40	1.8	242.	227.	15.	7.	491.	1.5
L22	06/16	58:40	171:05	Y34036	Z49708	45	0.8	58.	36.	3.	0.	106.	0.0
L23	06/23	58:40	171:43	Y34024	Z49733	50	1.2	0.	3.	1.	1.	5.	25.0
L25	06/26	58:40	173:00	Y33954	Z49883	62	1.8	1.	2.	0.	0.	3.	0.0
L26	06/26	58:40	173:38	Y33908	Z49913	59	1.8	5.	7.	1.	0.	14.	0.0
L27	06/29	58:40	174:16	X17301	Y33956	53	2.9	19.	15.	0.	0.	34.	0.0
M01	06/08	59:00	167:53	Y33565	Z48850	22		185.	431.	0.	0.	596.	0.0
M02	07/14	59:00	167:05	Y33465	Z48601	20	5.0	0.	2.	0.	0.	2.	0.0
M13	06/17	59:00	168:32	Y33647	Z49043	25	2.2	723.	1302.	0.	0.	2025.	0.0
M19	06/17	59:00	169:11	Y33707	Z49211	29	1.3	497.	959.	0.	0.	1456.	0.0
M20	06/17	59:00	169:50	Y33756	Z49363	34	1.1	675.	695.	0.	0.	1283.	0.0
M21	06/17	59:00	170:29	Y33783	Z49492	33	2.0	910.	113.	0.	0.	1023.	0.0
M22	06/16	59:00	171:08	Y33799	Z49597	42	0.2	762.	213.	11.	0.	991.	0.0
M23	06/23	59:00	171:47	Y33792	Z49578	47	0.8	3.	135.	20.	9.	164.	5.3
M24	06/25	59:00	172:26	Y33773	Z49744	54	0.4	3.	2.	1.	5.	11.	50.0
M25	06/25	59:00	173:05	Y33745	Z49794	59	1.6	1.	4.	1.	2.	7.	27.3
M26	06/26	59:00	173:43	Y33709	Z49832	55	2.6	9.	17.	0.	1.	28.	4.8
M27	06/30	59:00	174:22	X17269	Y33667	63	2.4	162.	183.	1.	0.	351.	0.0
M28	07/01	59:00	175:03	X17062	Y33613	59	3.1	22.	31.	3.	3.	58.	4.7
M29	07/01	59:00	175:43	X16850	Y33572	71	2.6	21.	9.	0.	0.	30.	0.0
M30	07/02	59:00	176:18	X16668	Y33532	72	1.9	0.	1.	0.	0.	1.	0.0
M32	07/02	59:00	177:36	X16262	Y33439	71	3.0	704.	27.	4.	2.	736.	0.2
N01	06/08	59:20	167:55	Y33345	Z48768	21		2.	7.	0.	0.	9.	0.0
N18	06/11	59:20	168:34	Y33411	Z48946	22		26.	53.	0.	0.	79.	0.0
N19	06/11	59:20	169:14	Y33470	Z49113	27		1025.	1866.	0.	0.	2891.	0.0
N20	06/10	59:20	169:52	Y33513	Z49253	33		599.	1058.	0.	0.	1457.	0.0
N21	06/10	59:20	170:32	Y33543	Z49381	37		322.	31.	0.	0.	353.	0.0
N22	06/10	59:20	171:11	Y33559	Z49487	41		317.	59.	0.	0.	376.	0.0
N23	06/24	59:20	171:50	Y33560	Z49573	44	1.6	730.	119.	0.	11.	859.	1.2
N24	06/25	59:20	172:30	Y33549	Z49645	48	-0.3	2.	0.	0.	0.	2.	0.0
N25	06/25	59:20	173:09	Y33529	Z49701	55	0.8	5.	3.	1.	1.	9.	7.7
N26	06/25	59:20	173:48	Y33499	Z49745	60	0.8	7.	11.	1.	2.	21.	8.8
N27	06/30	59:19	174:27	X17239	Y33474	64	2.0	148.	187.	2.	2.	338.	0.5
N28	06/30	59:20	175:06	X17049	Y33430	70	2.4	113.	144.	0.	0.	256.	0.0
N29	07/01	59:00	175:45	X16354	Y33401	72	1.5	1.	4.	0.	0.	5.	0.0

NOTE: PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH

TABLE 6 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYBRID TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LOKAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LARGE		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LARGE				
013	06/09	59°40'	169°37'	Y33178	248858	21	846.	1321.	0.	0.	2167.	0.0		
019	06/09	59°40'	169°16'	Y33231	249013	25	1953.	1865.	0.	0.	3818.	0.0		
020	06/09	59°40'	169°55'	Y33271	249151	31	429.	994.	0.	0.	1423.	0.0		
021	06/10	59°40'	170°35'	Y33302	249276	37	405.	209.	0.	5.	619.	0.8		
022	06/10	59°40'	171°15'	Y33321	249384	40	489.	31.	0.	0.	521.	0.0		
023	06/24	59°40'	171°54'	Y33327	249472	42	-0.3	75.	153.	3.	0.	231.	0.0	
024	06/24	59°40'	172°34'	Y33323	249547	46	-0.8	53.	95.	1.	6.	154.	3.6	
025	06/24	59°40'	173°14'	Y33311	249610	52	0.4	1.	6.	0.	0.	7.	0.0	
026	06/24	59°40'	173°52'	Y33294	249659	67	1.6	1.	1.	0.	0.	1.	0.0	
027	06/30	59°39'	174°27'	X1723U	Y33278	61		5.	7.	0.	1.	13.	6.3	
028	06/30	59°40'	175°06'	X17046	Y33246	66	2.6	210.	58.	3.	1.	272.	0.4	
029	07/01	59°40'	175°52'	X16831	Y33210	73	1.6	5.	6.	2.	0.	12.	0.0	
030	07/01	59°40'	176°33'	X15640	Y33177	72	1.5	0.	11.	1.	0.	12.	0.0	
P18	06/09	60°00'	168°39'	Y32942	248768	20		422.	1393.	0.	0.	1815.	0.0	
P19	07/04	60°00'	169°18'	Y32988	248918	24	1.0	60.	124.	0.	0.	184.	0.0	
P20	07/04	60°00'	169°57'	Y33031	249052	30		514.	1207.	0.	0.	1721.	0.0	
P21	07/04	60°00'	170°37'	Y33062	249174	35	0.5	524.	392.	0.	0.	906.	0.0	
P22	07/04	60°00'	171°17'	Y33083	249281	33	-0.9	406.	436.	0.	0.	893.	0.0	
P23	07/04	60°03'	171°57'	Y33088	249370	36	-0.9	25.	259.	0.	0.	284.	0.0	
P24	07/13	60°00'	172°38'	Y33098	249452	36	0.0	363.	50.	0.	0.	413.	0.0	
P25	07/13	60°00'	173°18'	Y33092	249517	40	-0.4	1812.	189.	0.	0.	2001.	0.0	
P26	07/13	60°00'	173°56'	Y33084	249572	52	1.0	41.	39.	0.	0.	79.	0.0	
P27	07/12	60°00'	174°36'	Y33067	249618	59	1.7	6.	2.	0.	1.	9.	6.7	
P28	07/12	60°00'	175°16'	Y33050	249658	64	1.8	210.	109.	2.	2.	323.	0.7	
P29	07/11	60°00'	175°56'	Y33025	249691	70	1.4	1160.	423.	3.	0.	1587.	0.0	
P31	07/11	60°00'	177°12'	Y32982	249743	76	1.3	1.	1.	1.	1.	4.	16.7	
P32	07/11	60°00'	177°55'	Y32953	249765	78	1.4	37.	4.	1.	0.	42.	0.0	
P33	07/11	60°05'	178°43'	Y32879	249768	81	2.4	214.	3.	0.	2.	219.	0.9	
Q18	06/09	60°20'	168°41'	Y32701	249680	19		4.	9.	0.	0.	13.	0.0	
Q19	07/05	60°20'	169°20'	Y32748	248822	23	3.2	12.	40.	0.	0.	52.	0.0	
Q20	07/05	60°20'	170°02'	Y32789	248961	29	1.7	1111.	1655.	0.	0.	2767.	0.0	
Q21	07/05	60°20'	170°40'	Y32819	249074	34	-0.9	580.	348.	0.	0.	728.	0.0	
Q22	07/05	60°20'	171°22'	Y32843	249184	36	-0.3	754.	638.	0.	0.	1391.	0.0	
Q23	07/05	60°20'	172°04'	Y32865	249283	32	-0.5	51.	1561.	0.	0.	1612.	0.0	
Q25	07/13	60°19'	173°24'	Y32877	249430	32	0.2	1032.	723.	0.	0.	1755.	0.0	
Q26	07/13	60°19'	174°04'	Y32875	249490	50	-1.0	1967.	1116.	0.	0.	3083.	0.0	
Q27	07/12	60°20'	174°42'	Y32864	249537	56	1.5	0.	1.	0.	0.	1.	0.0	
Q28	07/12	60°20'	175°22'	Y32853	249581	61	1.8	222.	174.	0.	0.	396.	0.0	
Q29	07/12	60°20'	176°02'	Y32840	249617	66	1.4	17485.	4318.	20.	0.	21198.	0.0	
Q30	07/10	60°20'	176°43'	Y32822	249650	75	0.9	26.	8.	4.	3.	41.	6.8	
Q31	07/10	60°20'	177°23'	Y32805	249578	83	1.4	2.	0.	1.	0.	3.	0.0	
R23	07/07	60°40'	172°07'	Y32632	249187	33	-0.7	691.	1083.	0.	0.	1774.	0.0	
R24	07/07	60°40'	172°47'	Y32656	249278	24	1.5	23.	65.	0.	0.	88.	0.0	
R25	07/07	60°40'	173°28'	Y32658	249342	36	-0.3	112.	201.	0.	0.	314.	0.0	
R26	07/07	60°40'	174°08'	Y32671	249412	48	-1.0	244.	219.	0.	0.	463.	0.0	

NOTE:PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH

TABLE 6 DATA FROM THE 1980 EASTERN BERING SEA TRAWL SURVEY WHERE OPILIO AND HYBRID TANNER CRAB WERE TAKEN (CONTINUED)

STATION	DATE	LATITUDE	LONGITUDE	LGRAN C	DEPTH FTMS	BOTTOM TEMP	FEMALES	NUMBER PER MILE TOWED			TOTAL	PERCENT LARGE		
								MALES (SEE NOTE)						
								SMALL	PRERECruit	LARGE				
R27	07/07	60°40'	174°48'	Y32662 Z49466	54	0.7	31.	42.	0.	0.	73.	0.0		
R28	07/08	60°40'	175°27'	Y32658 Z49511	59	1.0	1.	8.	0.	0.	8.	0.0		
R29	07/08	60°40'	176°12'	Y32649 Z49556	64	1.2	1928.	509.	0.	0.	2437.	0.0		
R30	07/10	60°40'	175°48'	Y32644 Z49578	70	1.5	548.	161.	3.	1.	713.	0.2		
R31	07/10	60°40'	177°29'	Y32631 Z49609	79	1.4	47.	211.	5.	1.	263.	0.2		
R32	07/10	60°40'	173°10'	Y32619 Z49636	89	2.0	15.	29.	6.	2.	53.	4.2		
S29	07/08	61°00'	176°17'	Y32462 Z49480	61	1.0	62.	19.	1.	0.	82.	0.0		
S30	07/09	61°00'	176°58'	Y32461 Z49510	55	1.0	601.	192.	0.	0.	793.	0.0		
S31	07/09	61°00'	177°38'	Y32457 Z49543	74	1.7	58.	24.	7.	3.	91.	2.8		
S32	07/09	60°59'	178°18'	Y32454 Z49573	36	2.4	39.	53.	8.	7.	106.	6.5		
T29	07/08	61°20'	176°18'	Y32274 Z49390	53	0.5	878.	358.	0.	0.	1236.	0.0		
T30	07/09	61°20'	176°58'	Y32282 Z49432	64	1.0	13.	16.	0.	0.	29.	0.0		
U29	07/08	61°39'	176°28'	Y32096 Z49323	58	0.5	778.	289.	0.	0.	1067.	0.0		

NOTE:PRE-RECRUIT = 3.7-4.2 IN. WIDTH; LARGE = GREATER THAN 4.2 IN. WIDTH



